Honeywell

## ADEMCO VISTA SERIES VISTA-20P / VISTA-20PSIA VISTA-15P / VISTA-15PSIA Security Systems

**Installation and Setup Guide** 

## **RECOMMENDATIONS FOR PROPER PROTECTION**

#### The Following Recommendations for the Location of Fire and Burglary Detection Devices Help Provide Proper Coverage for the Protected Premises.

#### **Recommendations For Smoke And Heat Detectors**

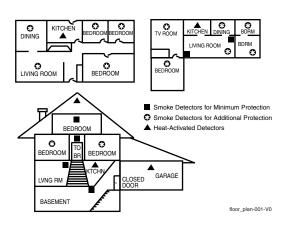
With regard to the number and placement of smoke/heat detectors, we subscribe to the recommendations contained in the National Fire Protection Association's (NFPA) Standard #72 noted below.

Early warning fire detection is best achieved by the installation of fire detection equipment in all rooms and areas of the household as follows: For minimum protection a smoke detector should be installed outside of each separate sleeping area, and on each additional floor of a multi-floor family living unit, including basements. *The installation of smoke detectors in kitchens, attics (finished or unfinished), or in garages is not normally recommended.* 

For additional protection the NFPA recommends that you install heat or smoke detectors in the living room, dining room, bedroom(s), kitchen, hallway(s), attic, furnace room, utility and storage rooms, basements and attached garages.

In addition, we recommend the following:

- Install a smoke detector inside every bedroom where a smoker sleeps.
- Install a smoke detector inside every bedroom where someone sleeps with the door partly or completely closed. Smoke could be blocked by the closed door. Also, an alarm in the hallway outside may not wake up the sleeper if the door is closed.



- Install a smoke detector inside bedrooms where electrical appliances (such as portable heaters, air conditioners or humidifiers) are used.
- Install a smoke detector at both ends of a hallway if the hallway is more than 40 feet (12 meters) long.
- Install smoke detectors in any room where an alarm control is located, or in any room where alarm control connections to an AC source or phone lines are made. If detectors are not so located, a fire within the room could prevent the control from reporting a fire or an intrusion.

THIS CONTROL COMPLIES WITH NFPA REQUIREMENTS FOR TEMPORAL PULSE SOUNDING OF FIRE NOTIFICATION APPLIANCES.

#### **Recommendations For Proper Intrusion Protection**

For proper intrusion coverage, sensors should be located at every possible point of entry to a home or commercial premises. This would include any skylights that may be present, and the upper windows in a multi-level building.

In addition, we recommend that radio backup be used in a security system so that alarm signals can still be sent to the alarm monitoring station in the event that the telephone lines are out of order (alarm signals are normally sent over the phone lines, if connected to an alarm monitoring station).

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# **Features and Installation Highlights**

#### This manual applies to the following Honeywell security systems:

ADEMCO VISTA-20P/ADEMCO VISTA-20PSIA/ADEMCO VISTA-20PCN (collectively referred to as VISTA-20P series), ADEMCO VISTA-15P/ADEMCO VISTA-15PSIA/ADEMCO VISTA-15PCN (collectively referred to as VISTA-15P series)

Features and procedures apply to all, except where differences are noted.

**SIA Installations:** The VISTA-20PSIA and VISTA-15PSIA are certified SIA-compliant controls that meet SIA specifications for False Alarm Reduction. The other controls described in this manual are not certified as SIA compliant, but can be programmed for False Alarm Reduction. To program for False Alarm Reduction, follow the SIA Guidelines noted in the applicable programming fields.

**NOTE:** Throughout this manual, device model numbers are ADEMCO model numbers unless otherwise noted.

#### Feature/Function **ADEMCO VISTA-20P Series ADEMCO VISTA-15P Series** Partitions • 2 partitions, can protect two independent VISTA-15P is not a partitioned system. areas • Common zone option allows either partition to arm, while leaving a common area (ex. lobby or fover) disarmed for access into the other partition. Up to 48 protection zones plus 16 keyfob Up to 32 zones plus 8 keyfob zones (zones Zones zones (zones 49-64) for total of 64 zones: 49-56) for total of 40 zones: • 8 basic hardwired zones (zones 1-8) with • 6 basic hardwired zones (zone 1-6) optional zone-doubling feature • Up to 16 additional wired zones (zones 9-• Up to 40 additional wired zones (zones 9-24) using up to 2 4219/4229 modules 48) using up to 5 4219/4229 modules • Up to 26 wireless transmitter zones • Up to 40 wireless transmitter zones (5800 (5800 series; zones 9-34) series: zones 9-48) • Up to 2 configurable zone types Up to 4 configurable zone types Up to 32 Security Codes, with separate Security Codes Up to 48 Security Codes, with separate authority levels and partition access authority levels Dedicated keys can arm the system. One-button arming Dedicated keys can arm the system. Schedules Up to 32; can control devices and/or auto-Up to 8; can control devices and/or autoarm/disarm arm/disarm Up to 4: activated by wired keypads Up to 2: activated by wired keypads Keypad macros Paging Up to 4 pagers; certain system conditions Up to 2 pagers; certain system conditions can report to pagers; can use a dedicated can report to pagers; can use a dedicated key on keypads to send a signal to a pager key on keypads to send a signal to a pager **Event Logging** 100 events; log display is done via Ademco 50 events; log display is done via Ademco Compass Downloader software or Compass Downloader software or installer/master code at Keypad installer/master code at Keypad Can assign for all zones (for alpha display keypads and/or 4285/4286 Phone Module). Zone descriptors Bell supervision Optional, detects external sounder wiring short or open; causes a trouble condition, keypad display, and sends a report to the central monitoring station, if enabled. RF jam detection Optional, for wireless systems detects a condition that may impede proper RF reception (i.e., jamming or other RF interference); causes keypad display, and sends a report to the central monitoring station (if trouble reporting is enabled). **Telephone** Line Built-in option can monitor the telephone line voltage and can cause a local display, or a Monitoring display and trouble/alarm sound Downloading Via an IBM compatible computer, Compass downloading software, and a compatible HAYES or CIA modem specified by Ademco.

## **Capabilities and Functions**

#### **Compatible Devices**

Device	VISTA-20P	VISTA-15P	Notes
Addressable Keypads	8	8	6150 Fixed-Word Keypad, 6160 Alpha Keypad, 6150V
			Fixed-Word Display Voice Keypad, 6160V Alpha
			Display Voice Keypad, 6150RF Keypad/Transceiver
Touch Screen (AUI)	2	2	Touch Screen (AUI) devices are in addition to the 8
Devices			addressable keypads. E.g., Symphony, 6270
4219, 4229 Zone	Up to 5 for	Up to 2 for	Zone numbers are predefined according to the device
Expander Modules	up to 40	up to 16	addresses used. See Expander Module Addresses table
	exp. zones	exp. zones	in Wiring section and set addresses accordingly.
5800 Series Wireless	Up to 40 RF	Up to 26 RF	Uses 5881/5883 Series Receivers/Transceivers.
	zones	zones	
Output relays and/or	Up to 16	Up to 8	Use any combination of 4204, 4229 and or Powerline
Powerline Carrier	-	-	Carrier Devices.
Devices (X-10 type)			Map output devices via *79 Menu mode.
On-Board Triggers	2	2	Can be used to reset 4-smoke detectors.
Output functions	Up to 48	Up to 24	Program output functions via *80 Menu mode.
4285/4286 Phone	Partition 1	yes	Provides access to the system via on premises or off-
Module	only		premises phones for arming, disarming, etc., plus
			control of relay outputs and Powerline Carrier devices.
Audio Alarm	Using AAV	Using AAV	Use ADEMCO UVS or Eagle Model 1250; can be used
Verification	module	module	in conjunction with an output trigger to permit voice
			dialog between an operator at the central station and
			a person at the premises.
Alarm output	12VDC, 2	12VDC, 2	Can drive the compatible sounders; steady output for
	AMP output	AMP output	burglary/panic, or temporal pulse (3 pulses – pause –
			3 pulses – pause – 3 pulses) for fire. Uses current
			limiting circuitry for protection.
Auxiliary Power Output	See note.	See note	12VDC, 600 mA maximum; uses fuse for protection.
Backup Battery	See note.	See note.	Rechargeable (sealed lead-acid type) 12VDC, 4AH
			minimum.
Long Range Radio	See note.	See note.	Primary telephone number messages can be reported
			via ECP connection to various Long Range Radios
			(check compatibility/availability of specific models)
AC Power Supply	See note.	See note.	Plug-in 120VAC transformer, ADEMCO 1321
			(1321CN in Canada) or, if using Powerline Carrier
			devices, ADEMCO 1361X10 Transformer Module

NOTE: All devices and accessories used in a Canadian installation must be Listed for use in Canada.

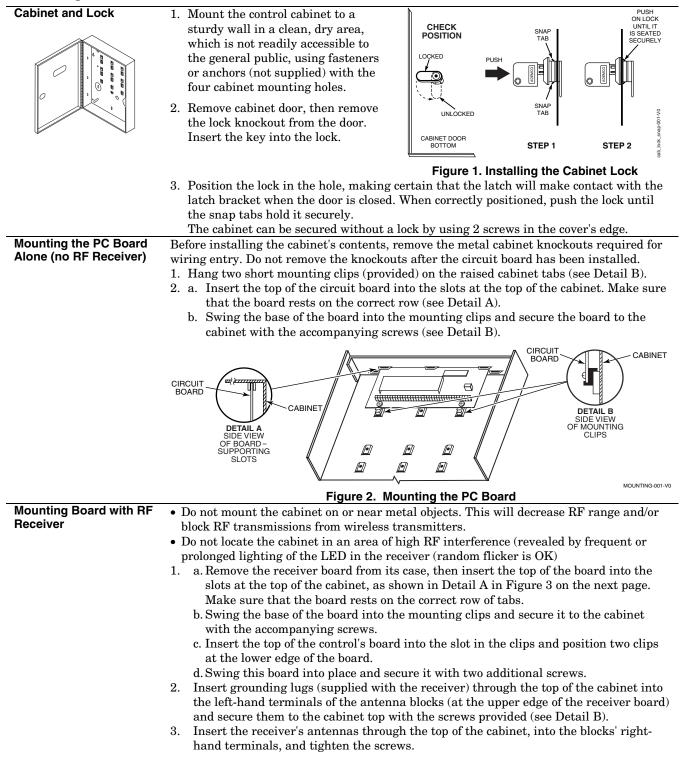
#### Important Installation Highlights (Installer Please Read)

- This system uses addressable keypads and Zone Expander Modules (see Table of Addresses in Section 2. Mounting and Wiring Wiring the Keypads and Other Addressable Devices).
- Keypads must be set for addresses 16-23 (first keypad is address 16, which is different from previous controls) and programmed in data fields \*190-\*196.
- Zone Expander Modules must be set for specific addresses (07-11), based on the zone numbers used.
- 4204 Relay Modules must be set for specific addresses (12-15).
- This control will not power-up unless AC power is connected (will not power-up on battery alone). However, once the system is powered up, it will operate on battery power in the event of AC loss.
- Relays have two programming menu modes: Use \*79 Menu mode to map module addresses and device (output) numbers. Use \*80 Menu mode to define the output functions.
- This system supports programmable function keys. Use \*57 Menu mode to define the function keys.
- This system provides various paging features. Refer to the *Programming Overview* section for a summary on pager programming.

## SECTION 2

## Mounting and Wiring the Control

#### Installing the Control Cabinet and PC Board



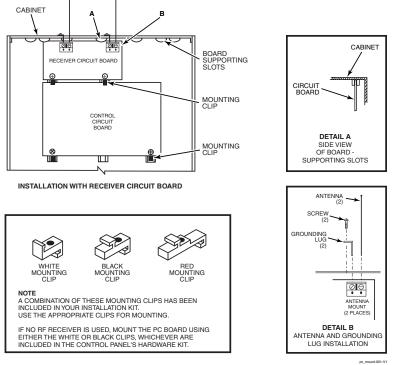


Figure 3. Mounting the PC Board and RF Receiver

#### AUXILIARY DEVICE CURRENT DRAW WORKSHEET

40mA/70mA** 40mA/150mA**		
40mA/150mA**		
60mA/160mA**		
60mA/190mA**		
150mA/400mA**		
180mA/280mA**		
60mA		
80mA		
30mA		
15/180mA‡		
30/100mA‡		
160mA		
300mA		
	150mA/400mA** 180mA/280mA** 60mA 80mA 30mA 15/180mA <sup>‡</sup> 30/100mA <sup>‡</sup> 160mA 300mA	150mA/400mA** 180mA/280mA** 60mA 80mA 30mA 15/180mA <sup>‡</sup> 30/100mA <sup>‡</sup> 160mA

Current available from Aux. terminals = 600 mA max.)<sup>1</sup> TOTAL =

\*If using hardwire devices such as PIRs, refer to the specifications for that particular unit's current draw. \*\* Values are for standby/alarm; alarm for keypads means armed with backlighting on and sounder on

the stallations, maximum current faw from the Auxiliary Output and the Alarm Output combined must not exceed 600 mA (500 mA max from Aux. Output). ‡Values are for relays OFF/relays ON.

#### CALIFORNIA STATE FIRE MARSHALL (CSFM) AND UL RESIDENTIAL FIRE 24-HOUR BATTERY BACKUP REQUIREMENTS

The California State Fire Marshal and UL have regulations which require that all residential fire alarm control panels must be provided with a backup battery which has sufficient capacity to operate the panel and its attached peripheral devices for 24 hours in the intended standby condition, followed by at least 4 minutes in the intended fire alarm signaling condition. This control panel can meet these requirements without using a supplementary power supply, provided that the panel's auxiliary power and bell output currents are limited as indicated below.

OUTPUT LIMITATIONS AND CORRESPONDING REQUIRED BATTERIES					
OUTPUT CURRENT LIMITATIONS		BATTERY INFORMATION			
Output Current Total	Maximum Auxiliary Current	Battery Capacity Recommended Battery			
	_	To Use (Amp/Hrs)	(Yuasa Model No.)		
600mA maximum total of	45mA	4AH	NP4-12 (or ADEMCO 467)		
auxiliary power plus bell	160mA	7AH	NP7-12		
output currents	200mA	8AH	NP4-12 (two) ‡		
	425mA	14AH	NP7-12 (two) ‡		
	500mA	17.2AH	NPG18-12		

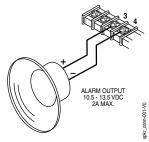
‡ NOTE: Use two batteries, connected in parallel. Obtain an Ademco Battery Harness Kit SA5140-1. (Both batteries will fit inside the cabinet.)

## AC Power, Battery, and Ground Connections

1321 Transformer	Connect the 1321 Transformer (1321CN in	Wire Run Chart			
<b>F</b>	Canada) to terminals 1 and 2 on the	Distance from control	Wire Size		
	control board. See Wire Run Chart for	Up to 50 feet	# 20		
	wire size to use.	50–100 feet	# 18		
	• Use caution when wiring the transformer to the control to guard	100-250 feet	# 16		
TO TERMINALS 1 AND 2	against blowing the transformer fuse (the fuse is non-replaceable).	read 250 fact using 16 gas	manina The		
	<ul> <li>Wiring to the AC transformer must not exvoltage reading between terminals 1 and or an "AC LOSS" message will be displaye</li> <li>Do not plug the transformer into the control are complete. As a safety precaution of the safety precaution</li></ul>	2 of the control must not f ed. <b>AC outlet</b> until all wiring	all below 16.5VA		
	making such connections.	on, always power down the	e control when		
I361X10 Transformer	1. Splice one end of a 3-conductor cable		N TRIGGER CONNECTOR		
(required if using	to the wire ends of the SA4120XM-1				
Powerline Carrier devices)	Cable.				
TO B-PIN CONNECTOR	<ol> <li>Connect the SA4120XM-1 cable plug to the 8-pin connector on the control (see the Summary of Connections diagram for location of the 8-pin connector).</li> <li>Connect the other end of the</li> </ol>	AC AC SYNC COM DATA () () () () () () () () () () () () () (	+12 AUX. (ORANGE) GND (-) (YELLOW) OUTPUT 81 (GREEN) DATA (BLUE) DATA (BLUE) COM (PUPPLE) SYNC (BLACK)		
/////	3-conductor cable to the 1361X10				
	Transformer, as shown in Figure 4.	CONTROL BOARD TERMS.			
	Canadian Installations: See	TERMS.	J		
TO TO TERMINALS 1 AND 2	Powerline Carrier Device section for	Saura 4 1261V10 Transfe			
TAND 2 👳	connections to the 1 boot M-10 interface	Figure 4. 1361X10 Transfo	rmer Connection		
	and trigger pins.				
Battery Connections	<ol> <li>Place the 12-volt backup battery in the ca</li> <li>After all connections to the control are conconnect the red and black flying leads on attach these leads to the battery terminal</li> </ol>	mpleted and AC power has the control board to the ba	ttery. Do not		
CONNECT FLYING LEADS AFTER AC POWER	<b>UL</b> For UL installations and Residential fire at left for the correct battery size required to	e installations, refer to the cl meet the mandatory standb	nart on page 2-2 y time.		
IS APPLIED					
Battery Saver Feature	The battery will disconnect from the system This assists the control panel in recharging t <b>IMPORTANT:</b> The panel will not power up plug the transformer in first, and then connect	the battery when AC is res initially on battery power	tored.		
Earth Ground	• This product has been designed and labora damage from generally expected levels of h not normally require an earth ground.	tory-tested to ensure its re			
CONTROL POARD CONTROL POARD 25 DESIRED	• If an earth ground is desired for additional protection in areas of severe electrical activity, terminal 25 on the control board, or the cabinet, may be used as the ground connection point. The following are examples of good earth grounds available at most installations.				
	Metal Cold Water Pipe: Use a non-corrosive secured to the pipe to which the ground lead				
0-100-bit line	secured to the pipe to which the ground lead is electrically connected and secured. <b>AC Power Outlet Ground:</b> Available from 3-prong, 120VAC power outlets only. To test the integrity of the ground terminal, use a 3-wire circuit tester with neon lamp indicators, such as the UL Listed Ideal Model 61-035, or equivalent, available at most electrical supply stores.				

## Sounder (Bell) Connections

#### **Basic Connections**



- Make sounder connections to alarm output terminals 3(+) and 4(-).
- The 12VDC sounder output activates when an alarm occurs.
- Total current drawn from this output cannot exceed 2 amps (going beyond 2 amps will overload the power supply, or may cause the electronic circuit protecting the sounder output to trip).
- You must install a battery, since the battery supplies this current.

#### Supervised output

- 1. Cut the red Bell Supervision Jumper located above terminals 2 and 3 on the PC board.
- 2. Connect a 2k ohm resistor across the terminals of the last sounder. See Figure 5.

This control complies with NFPA requirements for temporal pulse sounding of fire notification appliances. Temporal pulse sounding for a fire alarm consists of: 3 pulses – pause – 3 pulses – pause – 3 pulses – pause – 3 pulses – tc..

Connect keypads and other addressable devices (4204, 4219, 4229, 4286, 5881, LRR, etc.) to the control's keypad terminals as shown on the Summary of Connections diagram. The system supports up to 8 keypads, which can be assigned to partitions in

Determine wire size using the Wire Run Chart on the following page. For single 4-wire runs, determine the current drawn by all units, then refer to the Wiring Run chart to

determine the maximum length that can be safely used for each wire size.

## UL

- Use only UL Listed sounding devices for UL installations.
- Bell supervision is required for fire alarm installations.
- The total current drawn from the alarm output and the auxiliary power output, combined, cannot exceed 600 mA. In addition, the sounding device must be a UL Listed audible signal appliance rated to operate in a 10.2-13.8 VDC voltage range, and must be mounted indoors.

any combination (see program fields \*190-\*196).

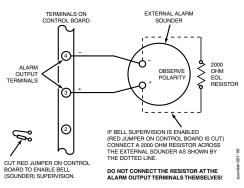
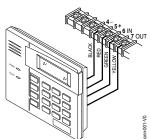


Figure 5. Sounder Wiring (Supervised)

## **Connecting the Keypads and Other Addressable Devices**

#### Connections



## Supplementary Power (optional)



Use supplementary power if the control's aux. power load for all devices exceeds 600mA (suggested power supply: AD12612). Connect as shown in Figure 6. Be sure to connect the negative (–) terminal on the power supply unit to terminal 4 (AUX –) on the control.

**IMPORTANT:** Keypads powered from supplies that do not have a backup battery will not function if AC power is lost. Make sure to power at least one keypad in each partition from the control's auxiliary power output.

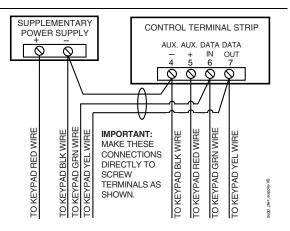


Figure 6. Using a Supplementary Power Supply

Keypad Notes	Set device addresses. Refer to the instructions included with the devices and set each address according to the <b>Table of Devices Addresses</b> .
	See <i>Keypad Programming Fields</i> (fields *190-*196) in <i>Section 4. Data Field Programming</i> for details on enabling keypad addresses, assigning keypad partitions and selecting keypad sounding options.
	<b>IMPORTANT:</b> Each keypad must be assigned a unique, predefined address, <b>from 16 to 23. The first keypad is address 16</b> (default = partition 1, all sounds enabled).
	<ul> <li>TOUCH SCREEN KEYPAD (AUI) NOTES:</li> <li>Use of up to 2 AUI devices (e.g., 6270, Symphony) is independent from standard keypads and does not affect the number of standard keypads the system can support.</li> <li>AUI devices must be set for either address 1 or address 2, depending on which unit is enabled in field *189.</li> </ul>
	• To ensure proper AUI device operation, connect only to controls having microprocessor version 3.0 or higher, and use AUI devices with the following rev levels: 6270 series use version 1.0.9 or higher; 8132/8142 (Symphony) series use version 1.1.175 or higher.
Long Range Radio Connections	<ul> <li>Connect the data in/data out terminals and voltage input terminals of the Long Range Radio to the control's keypad connection points.</li> <li>Set the radio's address to "03" following the instructions provided with the radio.</li> <li>Use compatible Long Range Radios (e.g., 7720PLUS, 7820, 7835C, or 7845C).</li> </ul>

	Wire Run Chart For Devices* Drawing Aux Power From The Control (12V+ & 12V–)							
Wire	TOTAL CURRENT DRAWN BY ALL DEVICES CONNECTED TO A SINGLE WIRE RUN							
Size	50 mA or less	100 mA	300 mA	500 mA	600 mA			
#22	900 ft (274m)	450 ft (137m)	150 ft (46m)	90 ft (27m)	75 ft (23m)			
#20	1400 ft (427m)	700 ft (213m)	240 ft (73m)	140 ft (43m)	120 ft (37m)			
#18	1500 ft (457m)	1100 ft (335m)	350 ft (107m)	220 ft (67m)	170 ft (52m)			
#16	1500 ft (457m)	1500 ft (457m)	550 ft (168m)	350 ft (107m)	270 ft (82m)			

\* Includes Keypads, RF Receivers, Zone Expander/Relay Units, 4285/4286 Phone Module, and Long Range Radio. Maximum wire lengths for any device that is homerun to the control can also be determined from the Wiring Run Chart, based on the current draw of that device <u>alone</u>.

The length of all wire runs for both partitions combined must not exceed 1500 feet (457m) when unshielded quad conductor cable is used (750 feet if shielded cable is used). This restriction is due to the capacitive effect on the data lines when quad cable is used.

## **Table of Device Addresses**

This Device	Uses Address	Reports as <sup>††</sup>	Enabled By
RF Receiver	00	100	*56 zone programming: input device type entry
AUI 1	01	101	automatic if AUI enable field *189 enabled for AUI 1
AUI 2	02	102	automatic if AUI enable field *189 enabled for AUI 2
Long Range Radio	03	103	automatic if output to long range radio field *29 enabled
4286 Voice Module	04	104	automatic if phone module access code field *28 enabled
Zone Expanders (4219/4229):			*56 zone programming: input device type, entry 2, then:
module 1 (for zones 09 - 16)	07**	107	automatic if zone no. 9-16 set as AW type or relay assigned
module 2 (for zones 17 - 24)	08	108	automatic if zone no. 17-24 set as AW type or relay assigned
module 3 (for zones 25 - 32)	09†	109	automatic if zone no. 25-32 set as AW type or relay assigned
module 4 zones 33 - 40	10 <sup>†</sup>	110	automatic if zone no. 33-40 set as AW type or relay assigned
module 5 zones 41 - 48	11†	111	automatic if zone no. 41-48 set as AW type or relay assigned
Relay Modules (4204):			*79 output device programming: device address prompt:
module 1	12	112	entered at device address prompt
module 2	13	113	entered at device address prompt
module 3	14†	114	entered at device address prompt
module 4	15 <sup>†</sup>	115	entered at device address prompt
Keypads:			data field programming as listed below:
keypad 1	16	n/a	always enabled for partition 1, all sounds enabled.
keypad 2	17	n/a	data field *190
keypad 3	18	n/a	data field *191
keypad 4	19	n/a	data field *192
keypad 5	20	n/a	data field *193
keypad 6	21	n/a	data field *194
keypad 7	22	n/a	data field *195
keypad 8	23	n/a	data field *196
5800TM Module	28	n/a	automatic

\*\* address 07 not available if zone-doubling enabled

† 4219/4229 addresses 9-11 and 4204 addresses 14-15 apply to the VISTA-20P.

†† Addressable devices are identified by "1" plus the device address when reporting. Enter a report code for zone 91 to enable addressable device reporting (default = reports enabled). See field \*199 for addressable device (ECP) 3-digit/2-digit identification keypad display options.

#### Hardwire Zones and Zone Expansion Normally Open Zones/ N.O. EOLR Zones Hardwire Zones 1. Connect open circuit devices in parallel across the loop; for EOLR zones, connect the EOLR across the loop wires at the last device. 2. Enable normally open/EOLR zones using Zone Programming mode, "Hardwire Type" prompt. Normally Closed Zones/ N.C. EOLR Zones 1. Connect closed circuit devices in series in the high (+) side of the loop; for EOLR zones, connect the EOLR in series following the last device. 2. Enable normally closed/EOLR zones using Zone Programming mode, "Hardwire Type" prompt. End of Line Resistor (EOLR) Notes • If the EOLR is not at the end of the loop, the zone is not properly supervised and the system may not respond to an "open" on the zone. • Zone 1 is intended for EOLR only. UL For UL commercial burglar alarm installations, use EOLR zones. **Double-Balanced Zones** Connect as shown below (resistor provided Θ 0 12 ⊖ 14 (V20P only) 13 for one device). **IMPORTANT:** Double-balanced zones provide zone tamper protection, and should be used as burglary zones only. Do not use double-balanced zones as fire zones. 2k ZONE 3 **ZONE 4** Fig. 7. Typical Double Balanced Zones Zone Doubling This feature provides two hardwired () 10 $\bigcup_{11}$ (V20P only) normally closed zones for each standard hardwired zone connected to the control's **70NE 2** terminals (but does not increase the total number of zones supported by the control). If 3k enabled (Zone Programming mode, ZONE 10 "Hardwire Type" prompt, option "3"), C **۸**۸۸ hardwire zones are automatically paired as 6 2k Fig. 8. Typical Zone Doubling Wiring shown in the table. Connect as shown below (resistors provided). Zone Doubling Table Paired with zone • Do not use zone doubling for fire Zone 2 10 zones. 3 11 **NOTE:** A short across the EOL (i.e., at 4 12 13 5 terminal) on either zone of a zone-doubled 6 14 pair or on a double-balanced zone causes a 7 15 tamper condition (displayed as CHECK plus 8 16 zone numbers) **Smoke Detectors** 1. Connect up to 16 (10, if "clean me" option used) 2-wire smoke detectors across zone 1 terminals 8 (+) and 9 (-) as shown in the Summary of Connections diagram at the back this manual. Observe proper polarity when connecting the detectors. 2. Connect an EOL resistor across the loop wires at the last detector. 3. Connect 4-wire smoke detectors (up to 16, depending on detector current draw) to any zone from 2-8 as shown in Figure 7 (on next page). **Power Reset:** This control does not automatically reset power to 4-wire smoke detector zones, so you must use a relay (e.g., 4204, 4229), or on-board trigger to reset LC ZONE 1 power (also required for fire verification). Do this by programming the designated relay/trigger as zone type 54 (fire zone reset); see **On-Board Trigger** section for other information.

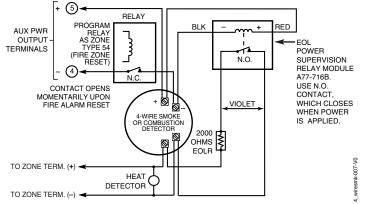
NOTE: Maximum current on trigger 17 is 100mA.

#### **Smoke Detector Notes**

• Fire Verification (zone type 16): The control panel will "verify" a fire alarm by resetting the smoke detectors after the first alarm trigger, and then waiting 90 seconds for a second alarm trigger. If the smoke detector or thermostat does not trigger again, the control will disregard the first trigger, and no alarm signal will occur. This feature eliminates false alarms due to electrical or physical transients. **SIA Installations:** If using fire verification on zones other than zone 1, UL Fire Alarm

Listed relay accessories must be used to reset power as described in the Power Reset paragraph above.

- The zone 1 alarm current supports only one smoke detector in the alarmed state.
- **Clean Me Option:** If enabled (field \*174 = 1; \*56 zone programming, response time prompt = 3), certain ESL smoke detectors send "clean me" reports as appropriate. If used, the maximum number of detectors is reduced to 10 (not standard 16). Refer to the ESL documentation included with the smoke detector for information regarding compatibility with the clean-me option.
- Do not use 4-wire smoke detectors on zone 1.



#### Figure 9a. 4-Wire Smoke Detector Using Relay for Power Reset

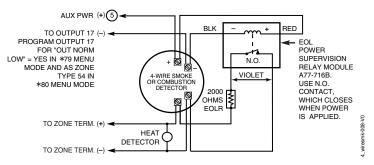
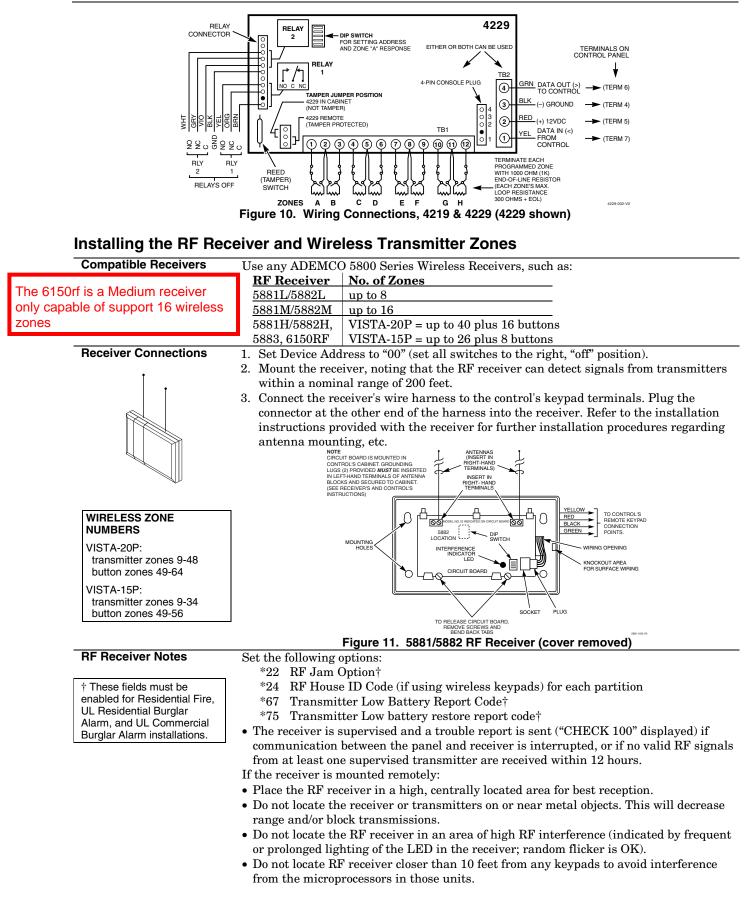


Figure 9b. 4-Wire Smoke Detector Using Output 17 for Power Reset

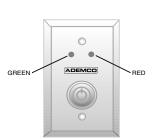
4010/4000 Europaian	
4219/4229 Expansion	1. Connect each module to the control's keypad terminals and set the device addresses.
Zones	• VISTA-20P: Up to 40 expansion zones using up to 5 Zone Exp. Modules.
	• VISTA-15P: Up to 16 expansion zones using up to 2 Zone Exp. Modules.
	<ul> <li>2. Connect sensors to the module's loops. See Figure 8 on the following page.</li> <li>Use 1000 ohm end-of-line resistors at the end of loops connected to the 4219/4229 modules. (EOLRs used on the control terminals are 2000 ohms.)</li> </ul>
	<ul> <li>Expansion zones have normal response time (300-500 msec), except zone connected to each module's loop "A," which can be set for fast response (10-15 msec).</li> <li>If using relays with the 4229, connect the desired field wiring to the unit's relay contact</li> </ul>
*	terminals.



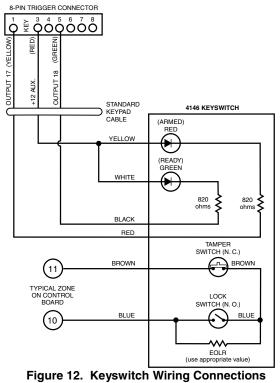
Installing a 5800TM Module	<ul> <li>Use this module only if you are using one or more wireless bi-directional keypads or keyfobs with a wireless Receiver; 5800TM is not necessary if using a Transceiver (e.g., 5883).</li> <li>The 5800TM must be set to address 28 (cut red-W1 jumper).</li> <li>The 5800TM can be used in partition 1 only.</li> <li>For additional information regarding the 5800TM, refer to the 5800TM's instructions.</li> <li>Mount the 5800TM next to the RF receiver (between one and two feet from the receiver's antennas) using its accompanying mounting bracket. Do not install within the control cabinet.</li> <li>Connect the 5800TM to the control panel's keypad connection terminals as shown on the Summary of Connections diagram and set to address 28.</li> </ul>
Installing the Transmitters	<ul> <li>Refer to the table of compatible devices at the back of this manual.</li> <li>Supervised transmitters† send check-in signals to the receiver at 70-90 minute intervals. If at least one check-in message is not received from each transmitter within a 12-hour period, the "missing" transmitter number(s) and "CHECK" is displayed. († Hand-held transmitters, e.g., 5802, 5802CP, 5804, 5804BD, 5827, 5827BD, do not send check-in signals.)</li> <li>To be sure reception of the transmitter's signal at the proposed mounting location is adequate, perform a Go/No Go Test, described in the <i>Testing the System</i> section.</li> <li>Install transmitters in accordance with the instructions provided with each.</li> <li>Set 5827, 5827BD, 5804BD wireless keypads to the programmed House ID (field *24), using its DIP switches (5827) or follow the instructions provided with the device.</li> <li>Use *56 or *58 Zone Programming Menu modes to program zone information and enroll transmitters (VISTA-20P: zones 9-48, buttons 49-64; VISTA-15P: zones 9-34, buttons 49-56).</li> <li>Wireless Keys: Use Wireless Key Programming Templates section of the *58 Zone Programming Menu mode to program zone information and enroll each button of the wireless keys used. Once a wireless key is enrolled, it must be assigned to a user before it becomes active. See Adding/Deleting Security Codes section for procedure.</li> </ul>
	<ul> <li>ULC NOTE: In accordance with ULC standards, the RF supervision period for the VISTA-20PCN and VISTA-15PCN is three hours for Fire zones (Zone Type 9 and 16) and 12 hours for all other zone types.</li> <li>UL The following transmitters are not intended for use in UL installations: 5802MN, 5802MN2, 5804, 5804BD, 5814, 5816TEMP, 5819, 5819WHS &amp; BRS, and 5850.</li> <li>The 5827BD and 5800TM can be used in UL Listed Residential Burglar installations.</li> </ul>
Transmitter Battery Life	<ul> <li>See Wireless Transmitter paragraph in the <i>Limitations of This Alarm System</i> statement located at the end of this manual for information on transmitter battery life.</li> <li>Some transmitters (e.g., 5802 and 5802CP) contain long-life but non-replaceable batteries, and no battery installation is required. At the end of their life, the complete unit must be replaced (and a new serial number enrolled by the control).</li> <li>Button-type transmitters (such as 5801, 5802, and 5802CP) should be periodically tested for battery life.</li> <li>The 5802MN and 5804 Button Transmitters have replaceable batteries.</li> <li>Do not install batteries in wireless transmitters until you are ready to enroll during system programming. After enrolling, batteries need not be removed.</li> </ul>

### Installing a Keyswitch

#### Keyswitch Connections



- 1. Connect the 4146 keyswitch's normally open momentary switch to a zone's (2-8) terminals. Remove the 2000 ohm EOL resistor if connected across the selected zone.
- 2. Using a standard keypad cable as shown: Connect the yellow and white keyswitch wires to trigger connector pin 3 (+12V). Connect the Red and Green LED wires to the appropriate output 17/output 18 trigger connector pins.
- 3. Connect a 2000 ohm EOL resistor across the momentary switch.
- 4. You can wire an optional closed-circuit tamper switch (model 112) in series with the zone. If the switchplate is then removed from the wall, the tamper will open, disabling keyswitch operation until the system is next disarmed from the keypad. If the tamper is opened when the system is armed, an alarm will occur.



#### **Keyswitch Notes**

**UL** A UL Listed keyswitch is required for fire installations and UL commercial and residential burglar alarm installations. The Ademco 4146 keyswitch is UL Listed.

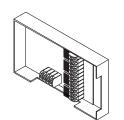
- If a keyswitch is used on:
- an installation that transmits opening and closing signals, the keyswitch zone must be programmed to send opening and closing signals.
- a UL commercial burglar alarm installation, the keyswitch's tamper switch must be connected in to the alarm system. This tamper switch zone must also be programmed for Zone Type 05 – Trouble by Day / Alarm by Night.
- a fire alarm installation, the keyswitch must be located next to an alphanumeric display keypad.
- Use 4146 keyswitch or any N.O. keyswitch.
- Use only one keyswitch per partition.
- When using a keyswitch, the zone it is connected to is no longer available for use as a protective zone.
- Use \*56 Menu mode to program the keyswitch zone and assign it zone type 77.
- Use \*80 Menu mode to program the LED functions: program outputs 17 and 18 for system operation zone type 78 (red LED) and 79 (green LED) as appropriate (see *Output Device Programming* section).

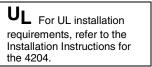
## **Connecting Relay Modules, Powerline Carrier Devices and Output Triggers**

1. Mount either remotely or in the control panel.

4-conductor twisted cable for long wiring runs.

#### 4204/4229 Relay Modules





	VISTA-15P: Up to	8 relays (if no	powerline ca	arrier de	vices	are used)
3.	Connect the desire	ed field wiring	to the unit's	relay co	ntact	terminals.
		4204 DIP SWITCH FOR SETTING DEVIC AND ENABLING/DISA		RELAY 4 TYPICAL (SHOWN "OFF")	RELAY	
		COVER TAMPER (REED) SWI	тсн		3	© — № © — №
		¢	4-PIN TOUCHPAD PLUG EITHER OR BOTH CAN BE USED TB1 (13) (14) (15) (16)		RELAY 2 RELAY 1	
				DATA IN FROM CONTRO (-) GROUND DATA OUT TO CONTROL	DL	TB2
				· (+) 12V		4204_conn-1-V0

2. Connect each module to the control's keypad terminals and set the device addresses as previously described in the *Connecting Keypads and Other Addressable Device* section. Use the connector harness supplied with the module. Use standard

VISTA-20P: Up to 16 relays (if no powerline carrier devices are used)



• Supervision: 4204 and 4229 modules are supervised against removal. The module's device address is displayed as follows if a module is disconnected from the control's terminals, or if the module cover is removed and the tamper jumper is installed: Alpha: CHECK xx Wire Expansion

FAULT xx Wire Expansion

ALARM xx Wire Expansion

Fixed-Glass: lxx (or 91 if field \*199 set for 2-digit display) where "xx is the module's address.

- If communication/tamper failure occurs on a device with zones wired to it, all zones on the device will be displayed in their respective partitions.
- Install the powerline carrier devices according to the instructions included with each. VISTA-20P: Up to 16 devices (if no relays are used) VISTA-15P: Up to 8 devices (if no relays are used)
- 2. Use Programming Mode to enter the device house ID in data field\*27, and enter the unit code using \*79 Output Device menu Mode.
- 3. See connections diagram in the AC Wiring section for connecting the 1361X10 transformer to the triggers.
- You must use a 1361X10 Transformer instead of the 1321 Transformer.
- The 1361X10 Transformer provides AC power to the control panel, and also supplies signals from the control panel through the premises AC wiring to the Powerline Carrier devices (which are plugged into AC outlets). You can then make devices that are plugged into Powerline Carrier devices perform various functions in response to commands you enter at the security system keypads.

Canada: Use the PSC04 Powerline Interface as shown below.

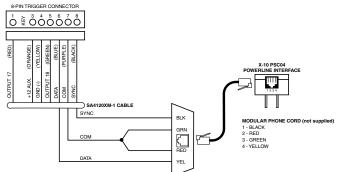


Figure 14. PSC04 Powerline Interface Connections

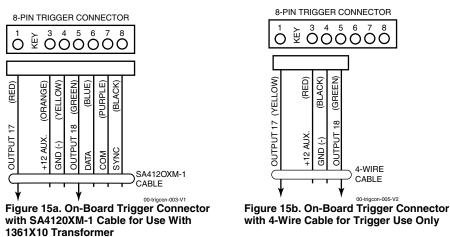
#### Powerline Carrier Devices

**UL** Powerline Carrier devices and the 1361X10 Transformer are not UL Listed for fire or burglary functions and are intended for home automation.

#### **On-Board Triggers**

Connect field wiring to the desired trigger pin on the 8-pin trigger connector centrally located above the terminal strip.

- If using 1361X10 transformer and powerline carrier devices, use the SA4120XM-1 cable (part of 4120TR Trigger Cable). See *Wiring the AC Transformer* section for transformer connections.
- If only using the on-board triggers, you can use a 4-wire cable (N4632-4, supplied with the control) as shown below.



- Trigger outputs are normally high, and go low upon programmed condition.
- The outputs can be programmed for inverted operation (normally low, go high) using \*79 Menu mode.
- Program these triggers using \*80/\*81 Menu modes as you would for any other relay output.
- When using these outputs, note:
- pin 1 = output number 17 (trigger 1):

15 ohms to ground when closed (output low), open when off (output high, normal default); can be used to reset smoke detector power (must set "output normal low = yes" in \*79 Menu mode, and set for zone type 54, fire zone reset, in \*80 Menu mode); or can support 12V relay module (e.g., Altronix AX-RBS) that draws less than 100mA

pin 5 = output number 18 (trigger 2):

100~ohms to ground when closed (output low); open when off (output high, normal default); or can support 12V~relay module that draws less than 20mA

**UL** If on-board triggers are used, the wiring between the control unit and the UL Listed device must be run in conduit, be no more than 3 feet apart and have no intervening barriers or walls.

## Phone Line/Phone Module, and Audio Alarm Verification (AAV) Connections

Phone Line	Connect incoming phone line and handset wiring to the main terminal block (via an RJ31X jack) as shown in the Summary of Connections diagram at the back of this				
	manual.				
	Wire colors represent the colors of the cable to the RJ31X jack.				
285/4286 Phone Module	1. France 12 ( ( ) and ( ) and adda in and adda out connections from the phone module o				
A	the control, using the connector cable supplied with the phone module, then insert the based connector at the other and of the connector cable into the based or on the				
888	the keyed connector at the other end of the connector cable into the header on the phone module.				
IIIII	2. Connect Phone Module terminals as shown below. Use an RJ31X jack with a direct-				
	connect cord and make all connections exactly as shown.				
S. S	3. Caller ID Units: If a Caller ID unit is being used, connect the unit directly to the				
•	"Handset" terminals (21 & 22) on the control, as shown.				
<b>Compatibility:</b> 4286 Phone Modules must have					
software version WA4286-					
15.1 or higher (refer to the label on the square 4286	$\frac{\text{TERMINALS}}{\text{ON CONTROL}} \rightarrow \left\{ 21 \right\} \left\{ 22 \right\} \left\{ 23 \right\} \left\{ 24 \right\} \left\{ 25 \right\} \rightarrow \text{To earth ground (cold water pipe, etc.)} \right\}$				
microprocessor chip).					
,					
UL The 4285 and 4286					
modules are UL Listed only	THANDSET TERMINALS ON CONTROL MUST BE MOVED EROM THERE TO TERMINALS				
for use on residential fire	3 AND 4 ON THE 4285/4286.				
and UL residential burglar alarm installations.					
	VOLUME (4286 <sup>©</sup> KEYED <sup>©</sup> ONLY) <sup>©</sup> HEADER * NOTE: IF THE TELEPHONE HAS BUILT-IN CALLER ID,				
	BIONLY) BI HEADER THE CALLER ID FUNCTION MAY NOT WORK.				
	UNUSED 4285/4286				
	YELLOW: TO DATA OUT (term. 7)     TO CONTROL     TERMINAL ASSIGNMENTS       NO CONNECTION     PANEL     1 - TIP       PHONE INPUT     I				
	CONNECTOR RED: TO AUX (+) (term. 5) TERMINALS 2 - HING J				
	LEADS GREEN: TO DATA IN (term. 6) CONNECTIONS 5 - NO CONNECTION 5				
	6- } AUDIO OUT 5 7- } 4286 ONLY 5				
	Figure 16. 4285/4286 Phone Module Wiring Connections				
	• Only one phone module can be used and it can only be connected to partition 1.				
	• The phone lines must be in service for the phone module to function, even when				
	accessing the system from an on-premises phone.				
	• If you are also using an Audio Alarm Verification (AAV) unit, refer to <i>Audio Alarm Verification (AAV)</i> section for special wiring connections.				
	<b>CAUTION:</b> To reduce the risk of fire, use only No. 26 AWG or larger telecommunication line cord for phone line connections.				
Phone Module Problems	If no touch tones are produced following access to the security system from on-premises				
	(this problem may arise in rare cases), it may be necessary to reverse the wires connected				
	to terminals 3 and 4 on the phone module and the wires connected to terminals (21) &				
	(22) on the control. The wiring diagram shows the wiring connections that will provide				
	proper operation in most cases.				
	proper operation in most cases. Connection to the incoming telco line via a RJ31X jack and direct-connect cord, as shown				
	proper operation in most cases. Connection to the incoming telco line via a RJ31X jack and direct-connect cord, as shown is essential, even if the system is not connected to a central station. The 4285 or 4286 will				
	proper operation in most cases. Connection to the incoming telco line via a RJ31X jack and direct-connect cord, as shown is essential, even if the system is not connected to a central station. The 4285 or 4286 will not function if this is not done and an error signal (fast busy signal) will occur when				
	proper operation in most cases. Connection to the incoming telco line via a RJ31X jack and direct-connect cord, as shown is essential, even if the system is not connected to a central station. The 4285 or 4286 wi				
	proper operation in most cases. Connection to the incoming telco line via a RJ31X jack and direct-connect cord, as shown is essential, even if the system is not connected to a central station. The 4285 or 4286 will not function if this is not done and an error signal (fast busy signal) will occur when trying to access the system via the phone.				

Audio Alarm Verification
Connections
(AAV, "listen-In")

- Refer to the connection diagrams below. One diagram shows connections when a 4285/4286 Phone Module is used, the other shows connections when the 4285/4286 is not used.
- Connections use one of the on-board triggers.
- Set field \*91 for AAV and program the appropriate output (output 17 or 18) using \*80 Menu mode: select zone type 60 and output action 1 (close for 2 seconds) or action 2 (stay closed).
- For voice session monitoring, connect an EOLR zone to UVCM module terminals 6 & 7, and program the zone as zone type 81 (\*56 Menu mode).
  E.g., Using output 18 for the trigger, program an output function in \*80 Menu mode as: ZT = 60, P = 0, Action = 1, Device = 18
- Suggested AAV Module: ADEMCO UVS (shown) or Eagle 1250

UL UL installations using the AAV feature must use the ADEMCO UVCM module (part of the ADEMCO UVS system).

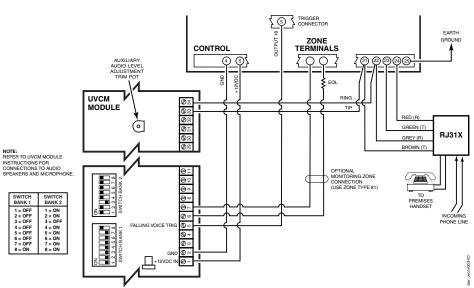


Figure 17a. Connection of AAV Unit When Not Using a 4285/4286 Phone Module

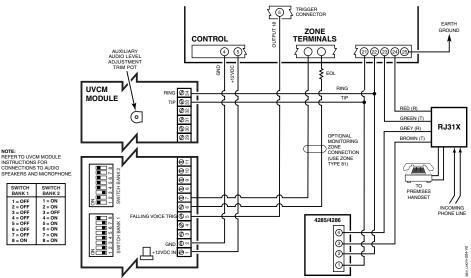


Figure 17b. Connection of AAV Unit When Using a 4285 or 4286 Phone Module

## SECTION 3 Programming Overview

## **About Programming**

- You can program the system at any time, even at the installer's premises prior to the actual installation.
- Programming can also be performed remotely from the installer's office/home, using an IBM personal computer, a modem, and Compass downloading software.

The following is a list of the various Programming modes used to program this system.

Programming Mode	Used to			
Data Field Programming	Program basic data fields used for setting the various system options.			
	Most of the data fields in this system have been programmed for specific default			
	values. However, some fields must be programmed for each particular installation to			
	establish its specific alarm and reporting features.			
*56 Zone Programming	Assign zone characteristics, report codes, alpha descriptors, and serial numbers for			
	5800 RF transmitters. See <b>*56 Zone Programming</b> in Section 5. Menu Mode			
	<b>Programming</b> for procedures for programming zones.			
*57 Function Key	Program each of the four alphabet function keys to perform one of several system			
Programming	operations.			
*58 Zone Programming	Similar to *56 mode, but provides a faster programming procedure and is intended for			
(Expert Mode)	those more experienced in programming controls of this type.			
*79 Output Device Mapping	Assign device addresses used by 4229 or 4204 Relay modules and map specific relays			
	and device outputs, and assign unit codes for Powerline Carrier devices.			
	See About Output Device Programming in Section 5. Menu Mode			
	<b>Programming</b> for details on setting devices for manual/automatic operation.			
*80 Output Definitions	Define up to 48 output definitions which can control the output relays mapped using			
	*79 Output Device Mapping mode.			
*81 Zone List Programming	Create Zone Lists for relay/powerline carrier zones, chime, night-stay, cross zones,			
	and pager zones.			
*82 Alpha Programming	Create alpha descriptors for easy zone identification.			
Scheduling Mode	Create schedules to automate various system functions.			
(code + [#] +64)				

## **Mechanics of Programming**

#### To program the system from a keypad:

- You must use a 2-line Alpha display keypad.
- Both partitions must be disarmed.

#### Data Field Programming Procedures

Task	Procedure					
Entering Program Mode	A) Press both [*] and [#] at the same time within 50 seconds after power is applied,					
	OR					
	B) After power-up, enter [Installer code (4-1-1-2)] + 8 0 0 (long beep indicates one of the					
	partitions is armed and system cannot enter program mode).					
	(method "B" is disabled if you exit Program mode using *98)					
Go to a Data Field	Press [*] + [Field Number]. A display of "EE" or "Entry Error" means you have entered a					
	nonexistent field. Simply re-enter [*] plus a valid field number.					
Entering Data	When the desired field number appears, simply enter the digits required. The keypad					
	beeps three times after the last digit is entered and automatically displays the next data					
	field in sequence.					
	If entering less than the maximum digits available (e.g., phone number field), enter the					
	desired digits, then press [*] to end the entry.					
Review a Data Field	Press [#] + [Field Number]. The field's data is displayed, but no changes can be made.					
Deleting an Entry	Press [*] + [Field No.] + [*] (applies only to phone number, account number, and pager					
	character fields).					

#### Interactive Mode Programming (\*56, \*57, \*58, \*79, \*80, \*81, \*82)

Entering Interactive Mede	
Entering Interactive Mode	Press [*] + [Interactive Mode No.] (for example, *56) while in Program Mode. The Alpha
	display have a will display the first of a series of successful
	display keypad will display the first of a series of prompts.
	After making the appropriate entry, press the [*] key to accept the entry and continue to
	the next prompt.

#### Loading Factory Defaults/Initializing for Download

To Load Default Entries	Press *97 while in Program Mode. This resets all data fields to the default values shown			
	on the Program Form. Use *97 only if you wish to return to the original factory-			
	programmed defaults.			
To Initialize Download ID	Press *96 while in Program Mode. This initializes the system for downloading and resets			
	all the subscriber account numbers and CSID.			

Do not press **\***97 to load defaults if any programming has been done previously—data already programmed into the system will be changed!

#### **Exiting the Programming Mode**

Prevent installer code	Press *98. Exits Programming Mode and prevents re-entry by:
reentry	Installer Code + [8] + [0] + [0]. To enter the programming mode if * 98 was used to exit,
	you must first power the system down. Then power up again, and press [*] and [#] at the
	same time, within 50 seconds of powering up.
	See field *88 for other Program mode lockout options.
Allow installer code	Press *99. Exits Programming Mode and allows re-entry by:
reentry	Installer Code + [8] + [0] + [0] or by: Pressing [*] and [#] at the same time, within 50
	seconds of power-up.

## **Zone Type Definitions**

Zone types define the way in which the system responds to faults in each zone.

Zone Type	Description
Type 00 Zone Not Used	Program a zone with this zone type if the zone is not used.
Type 01 Entry/Exit Burglary #1	<ul> <li>Assign to zones that are used for primary entry and exit.</li> <li>Provides entry delay when zone is faulted if control is armed in the Away, Stay, or Night-Stay modes.</li> <li>No entry delay provided when the panel is armed in the Instant/Maximum mode.</li> <li>Entry delay #1 is programmable for each partition (field *35).</li> <li>Exit delay begins whenever the control is armed, regardless of the arming mode selected, and is programmable (field *34).</li> </ul>
Type 02 Entry/Exit Burglary #2	<ul> <li>Assign to zones that are used for entry and exit and require more time than the primary entry/exit point.</li> <li>Provides a secondary entry delay, in same manner as entry delay #1.</li> <li>Entry delay #2 is programmable for each partition (field *36).</li> <li>Exit delay is same as described for Type 01.</li> </ul>
Type 03 Perimeter Burglary	<ul> <li>Assign to all sensors or contacts on exterior doors and windows.</li> <li>Provides an instant alarm if the zone is faulted when the panel is armed in the Away, Stay, Night-Stay, Instant or Maximum modes.</li> </ul>
Type 04 Interior Follower	<ul> <li>Assign to a zone covering an area such as a foyer, lobby, or hallway through which one must pass upon entry (to and from the keypad).</li> <li>Provides a delayed alarm (using the programmed entry 1 time) if the entry/exit zone is faulted first. Otherwise this zone type gives an instant alarm.</li> <li>Active when the panel is armed in the Away mode.</li> <li>Bypassed automatically when the panel is armed in the Stay or Instant modes; if armed in Night-Stay mode, zones assigned to zone list 05 (night-stay zone list) are not bypassed when system armed in Night-Stay mode.</li> </ul>

Type 05 Trouble by Day/ Alarm by Night	<ul> <li>Assign to a zone that contains a foil-protected door or window (such as in a store), or to a zone covering a sensitive area such as a stock room, drug supply room, etc.</li> <li>Can also be used on a sensor or contact in an area where immediate notification of an entry is desired.</li> <li>Provides an instant alarm if faulted when armed in the Away, Stay, Night-Stay, Instant or Maximum (night) modes.</li> </ul>
	<ul> <li>Maximum (night) modes.</li> <li>During the disarmed state (day), the system will provide a latched trouble sounding from the keypad (and a central station report, if desired).</li> </ul>
Type 06 24-hr Silent Alarm	<ul><li>Usually assigned to a zone containing an emergency button.</li><li>Sends a report to the central station but provides no keypad display or sounding.</li></ul>
Type 07 24-hour Audible Alarm	<ul> <li>Assign to a zone that has an emergency button.</li> <li>Sends a report to the central station, and provides an alarm sound at the keypad, and an audible external alarm.</li> </ul>
Type 08 24-hour Auxiliary Alarm	<ul> <li>Assign to a zone containing an emergency button, or to a zone containing monitoring devices such as water or temperature sensors.</li> <li>Sends a report to the central station and provides an alarm sound at the keypad. (No bell output is provided.)</li> </ul>
Type 09 Supervised Fire	<ul> <li>Provides a fire alarm on short circuit and a trouble condition on open circuit. A fire alarm produces a pulsing bell output.</li> <li>This zone type is always active and cannot be bypassed.</li> </ul>
Type 10 Interior w/Delay	<ul> <li>Provides entry delay (using the programmed entry time), if tripped when the panel is armed in the Away mode.</li> <li>Entry Delay 1 begins whenever sensors in this zone are violated, regardless of whether or not an entry/exit delay zone was tripped first.</li> <li>Bypassed when the panel is armed in the Stay or Instant modes; if armed in Night-Stay mode, zones assigned to zone list 05 (night-stay zone list) are not bypassed when system armed in Night-Stay mode.</li> </ul>
Type 12 Monitor Zone	<ul> <li>Works as a dynamic monitor of a zone fault/trouble (not alarm). In the case of a short/open, the message, "*ALARM*-24 Hr. Non-Burg#XXX " (where XXX is the zone number) will be sent to the Central Station. The system keypad will display a "check" message indicating the appropriate zone (but keypad beeping does not occur). Upon restoral of the zone, the message, "*RESTORE*-24 Hr. Non-Burg#XXX " will be sent to the Central Station.</li> <li>The "check" message will automatically disappear from the keypad dynamically, when the zone restores; a user code + off sequence is not needed to reset the zone.</li> <li>Faults of this zone type are independent of the system, and can exist at the time of arming without interference.</li> <li>Since this is a "trouble" zone type, do not use this zone type with relays set to activate upon "alarm."</li> </ul>
Type 14 24 Hour Carbon Monoxide Monitor	<ul> <li>Assigned to any zone with a carbon monoxide detector.</li> <li>The bell output will pulse when this zone type is alarmed.</li> <li>Always active and cannot be bypassed.</li> </ul>
Type 16 Fire w/Verification	<ul> <li>Provides a fire alarm when zone is shorted, but only after alarm verified.</li> <li>System verifies alarm by resetting zones for 12 seconds after short is detected. A subsequent short circuit within 90 seconds triggers fire alarm.</li> <li>Provides a trouble response when zone is open.</li> </ul>
Type 20 Arm-Stay (BR only)	<ul> <li>Arms the system in Stay mode when the zone is activated.</li> <li>Pushbutton units send the user number to the central station when arming or disarming.</li> <li>User number for button must be assigned.</li> </ul>
Type 21 Arm-Away (BR only)	<ul> <li>Arms the system in Away mode when the zone is activated.</li> <li>Pushbutton units send the user number to the central station when arming or disarming.</li> <li>User number for button must be assigned.</li> </ul>
Type 22 Disarm (BR only)	<ul><li>Disarms the system when the zone is activated.</li><li>User number for button must be assigned.</li></ul>

Type 23 * No Alarm Response	• Can be used on a zone when an output relay action is desired, but with no accompanying alarm (e.g., lobby door access).
Type 24 Silent Burglary	• Usually assigned to all sensors or contacts on exterior doors and windows where bells and/or sirens are NOT desired.
	<ul> <li>Provides an instant alarm, with NO audible indication at any keypad or external sounder, if the zone is faulted when the system is armed in the Away, Stay, Instant, or Maximum modes.</li> <li>A report is sent to the central station.</li> </ul>
Type 77	Assign to zone wired to a keyswitch.
Keyswitch	<ul> <li>Do not use devices assigned as input type "BR" with this zone type.</li> </ul>
Type 81 AAV Monitor Zone	<ul> <li>Assign to zone connected to AAV module.</li> <li>Monitors 2-way voice sessions as follows: <ul> <li>When the zone is faulted, all alarm sounding and dialer reporting stops, except for fire alarms, which immediately terminate the voice session and cause a fire report to be sent.</li> <li>When the zone is restored (session ended), sounding resumes (if bell timeout has not expired) and reports that were stopped are sent.</li> </ul> </li> </ul>
Types 90-93	Allows for various custom responses. Options include response to entry/exit delays, response
Configurable	opens/shorts, types of alarm/trouble sounding, dial delay, and unique Contact ID report codes. Types 92 and 93 can only be programmed via downloader. UL installations: Zone Types 90 -93
	may not be used as fire or burglar alarm zones on fire or UL burglar alarm installations.

\* The system can still be armed when these zone types are in a faulted condition.

**NOTE:** All of the zone types described are available for the wireless portion of the system, if used.

## **About Data Field Programming**

The following pages list this control's data fields in numerical order. Valid entries for each field are shown in italics. Explanations and special notes are presented below the entries.

Use the separate Programming Guide to record the data for this installation.

Data field programming involves making the appropriate entries for each of the data fields. Start Data Field programming by entering the installer code + 8 + 0 + 0.

**SIA Guidelines:** Notes in certain fields give instructions for programming the VISTA-20P/VISTA-15P for False Alarm Reduction. Fields unique to the **VISTA-20PSIA/VISTA-15PSIA** are indicated by heavy borders and reverse type heading "**V20PSIA/V15PSIA**" for easy identification.

### System Setup Fields (\*20 - \*29)

## \*20 Installer Code

Enter 4 digits, 0-9

The Installer Code can perform all system functions except it cannot disarm the system unless it was used to arm the system.

#### \*21 Quick Arm Enable

0 = do not allow quick arm; 1 = allow quick arm

If enabled, a user code is not needed to arm the system. Instead, users can press the [#] followed by an arming key to arm the system. However, the user code is always needed to disarm the system.

## \*22 RF Jam Option

 $\overline{O}$  = no RF jam detection; 1 = send RF jam report If enabled, a report is sent if the system detects an RF jamming signal.

UL installations must be 1 if wireless devices are used.

#### \*23 Quick (Forced) Bypass

 $\overline{0} = no \ quick \ bypass$   $1 = allow \ quick \ bypass \ (code + [6] + [#])$ Zones bypassed by this function will be displayed after the bypass is initiated.

UL installations must be 0 (no forced bypass)

#### \*24 RF House ID Code

00 = disable all wireless keypad usage

01-31 = House ID for partition 1, 2 and common The House ID identifies receivers and wireless keypads. If a 5827 or 5827BD Wireless Keypad or 5804BD Transmitter is being used, a House ID code **must** be entered and the keypad set to the same House ID. You can assign RF house ID for each partition.

#### \*26 Chime By Zone List 3

0 = no zone list (chimes on fault of any entry/exit or perimeter zone when chime mode on)

1 = use zone list (chimes on fault of specific zones programmed in relay zone list 3 when Chime mode on)

If enabled, you can define the specific zones intended to chime when faulted while the system is in Chime mode. Use zone list 3 to assign these zones (see **\*81 Zone List Programming** section for details).

## \*27 Powerline Carrier Device (X-10) House ID

0 = A; 1 = B; 2 = C; 3 = D; 4 = E; 5 = F; 6 = G; 7 = H; 8 = I; 9 = J; # + 10 = K; # + 11 = L; # + 12 = M; # + 13 = N; # + 14 = O; # + 15 = P

Powerline Carrier devices require a House ID, identified in this field. Program Powerline Carrier devices in interactive modes \*79, \*80 and \*81. Not intended for fire or UL installations.

## \*28 Access Code for Phone Module

1-9 = first digit of access code

\* or # = second digit of access code

(# +11 for "\*". or # +12 for "#")

You must assign a 2-digit access code for the 4285/4286Phone Module, if used. Example: If desired access code is 7\*, then 7 is the first entry, and [#] + 11 (for \*) is the second entry.

**NOTE:** A *0* in either digit disables the phone module. Must be *00* for UL Commercial Burglar Alarm installations.

## \*29 Long Range Radio Output

0 = not used; 1 = using Long Range Radio output

If selected, all messages programmed to go to the primary telephone line receiver will also be sent to the connected 7720PLUS, 7820, 7835, or 7845 Radio (sent in Contact ID format). The data line is supervised as well as certain functions in the radio. If communication is lost or a trouble develops, an attempt will be made to send a message via both radio and telephone to the central station. Program the radio for device address 3.

## Zone Sounds & Timing (\*31-\*39)



\*31 Single Alarm Sounding Per Zone (per armed period)

0 = no limit on alarm sounding per zone

**V20PSIAV15PSIA:** If "0" selected, "alarm sounding per zone" will be the same as the "number of reports in armed period" set in field \*93 (1 if one report, 2 if 2 reports, unlimited for zones in zone list 7).

#### 32 Fire Alarm Sounder Timeout

0 = ves: sounder timeout after time selected in field \*331 = no timeout; sounds until manually turned off This control complies with NFPA requirements for temporal pulse sounding of fire notification appliances. Temporal pulse sounding for a fire alarm consists of the following: 3 pulses - pause - 3 pulses - pause - 3 pulses. UL fire alarm installations: must be 1.

#### **\*33** Alarm Sounder Timeout

 $\overline{0} = No$  timeout; 1 = 4 min; 2 = 8 min; 3 = 12 min; 4 = 16 min This field determines whether the external sounder will shut off after time allotted, or continue until manually turned off.

UL Installations: For residential fire alarm installation, must be set for a minimum of 4 min (option 1); for UL Commercial Burglary installations, must be minimum of 16 min (option 4).

### \*34 Exit Delay

00 - 96 = 0 - 96 seconds; 97 = 120 seconds

V20PSIA/V15PSIA: 45 - 96 = 45 - 96 secs: 97 = 120 secs NOTE: Entries less than 45 will result in a 45-sec delay.

The system waits the time entered before arming entry/exit zones. If the entry/exit door is left open after this time expires, an alarm will occur. Common zones use same delay as partition 1.

UL installations: For UL Commercial Burglar Alarm (Grade AA) and UL Residential Burglar Alarm installations with line security, total exit time must not exceed 60 seconds. For UL Burglar Alarm installations without line security (Grade A), total exit time must not exceed 120 seconds.

SIA Guidelines: minimum exit delay is 45 seconds

#### 35 Entry Delay 1 (\*35), Entry Delay 2 (\*36)

\*36 00 - 96 = 0 - 96 seconds; 97 = 120 secs; 98 = 180 secs; 99 = 240 secs

V20PSIA/V15PSIA: 30-96 = 30 - 96 secs;

97 = 120 secs; 98 = 180 secs; 99 = 240 secs

NOTE: Entries less than 30 will result in a 30-sec delay.

Upon entering, the system must be disarmed before the time entered expires, otherwise it sounds an alarm. Common zones use same delay as partition 1.

UL Installations: For UL Residential Burglary Alarm installations, must be set for a maximum of 30 seconds; entry delay plus dial delay should not exceed 1 min. For UL Commercial Burglar Alarm, total entry delay may not exceed 45 seconds.

SIA Guidelines: minimum entry delay is 30 seconds

## **\*37** Audible Exit Warning

0 = no; 1 = yes

Warning sound consists of slow continuous beeps until the last 10 seconds, and then it changes to fast beeps. Sound ends when exit time expires.

SIA Guidelines: must be enabled (enter 1)

V20PSIA/V15PSIA: feature always enabled; field does not exist.

#### \*38 Confirmation Of Arming Ding

0 = no ding; 1 = confirmation ding after arming system2 = ding after arming from RF button or RF keypad only Confirmation of arming is 1/2-sec external sounder "ding." If 1 selected, ding occurs when closing report is sent, or at the end of Exit Delay.

If 2 selected, ding occurs upon reception of the wireless arming command.

UL Installations: must be 1 for UL Commercial Burglar Alarm installations.

#### \*39 Power-Up In Previous State

 $\overline{0}$  = always power-up in a disarmed state

1 = assume the system status prior to power down When the system powers up armed, an alarm will occur 1 minute after arming if a zone is faulted.

Note that if the previous state was armed Away or Stay, the system will not respond to sensor changes for 1 minute, which allows sensors such as PIRs to stabilize.

UL Installations: must be 1 (power-up in previous state) SIA Guidelines: must be 1

## Dialer Programming (\*40 – \*50)

### \*40 PABX Access Code or Call Waiting Disable

Enter up to 6 digits if PABX is needed to access an outside line. Do not fill unused spaces. 0-9. # + 11 for '\*'. # + 12 for '#', # + 13 for a pause (2 seconds)

To clear entries from field, press \*40\*. If fewer than 6 digits need to be entered, exit by pressing [\*].

**Call Waiting:** If the subscriber's phone service has "call waiting" (and is not using PABX), enter "\*70" ("# + 11") plus "# + 13" (pause) as the PABX entry to disable "call waiting" during control panel calls. If the subscriber does not have "call waiting" and is not using PABX, make no entry in this field.

**NOTES:** 1. The call waiting disable feature cannot be used on a PABX line. 2. Using Call Waiting Disable on a non-call waiting line will prevent successful communication to the central station.

V20PSIA/V15PSIA: If call waiting is used, enter call waiting disable digits as described above, and also set Call Waiting Disable option in field \*91.

#### \*41 Primary (\*41) and Secondary (\*42) Phone No.



\*42 Enter up to 20 digits. 0–9, # + 11 = '\*', # + 12 = '#', # + 13 = pause (2 secs)

If entering fewer than 20 digits, exit by pressing [\*] + next field number. To clear entries, press \*41\* or \*42\* respectively. Do not fill unused spaces.

**NOTE:** Backup reporting (see field \*49) is automatic only if there is a secondary phone number (field \*42).



Enter 4 or 10 digits, depending on selection in

\*48 Report Format field. Enter 0-9; # + 11 = B,

46 # + 12 = C, # + 13 = D, # + 14 = E, # + 15 = F.

\*43: Partition 1 primary. To clear entries: \*43\*.

- \*44: Partition 1 secondary. To clear entries: \*44\*.
- \*45: VISTA-20P. Part. 2 prim. To clear entries: \*45\*.
- \*46: VISTA-20P. Part. 2 second. To clear entries: \*46\*.

## \*47 Phone System Select

- If Central Station Receiver is not on WATS line: 0 = Pulse Dial; 1 = Tone Dial If Central Station Receiver is on WATS line:
- 2 = Pulse Dial; 3 = Tone Dial

Select the type of telephone service.

#### \*48 Report Format (Primary/Secondary)

- $\overline{0} = 3+1, 4+1$  ADEMCO L/S STANDARD
- 1 = 3+1, 4+1 RADIONICS STANDARD
- 2 = 4+2 ADEMCO L/S STANDARD
- 3 = 4+2 RADIONICS STANDARD
- 5 = ADEMCO 10-digit Contact ID®
- 6 = 4+2 ADEMCO EXPRESS
- 7 = ADEMCO 4-digit Contact ID®
- 8 = 3+1, 4+1 ADEMCO L/S EXP.
- 9 = 3+1, 4+1 RADIONICS EXP.

Select format for primary/secondary phone numbers.

### \*49 Split/Dual Reporting

= standard/backup reporting only (see Backup Reporting below)

To Primary No.	To Secondary No.
1 = alarms, restore, cancel	others
2 = all except open/close, test	open/close, test
3 = alarms, restore, cancel	all
4 = all except open/close, test	all
5 = all	all

Backup Reporting: All reports are sent only to the primary number unless unsuccessful after 8 attempts. If unsuccessful, the system will make up to8 attempts to send all reports to the secondary number. If still unsuccessful after the 16 attempts, the system displays the "COMM. FAILURE" message (FC for fixed-word displays).

#### \*50 Burglary Dialer Delay

0 = no dial delay; 1 = 15 secs; 2 = 30 secs; 3 = 45 secs UL: must be 0.

SIA Guidelines: delay must be minimum 30 seconds

#### V20PSIA/V15PSIA:

**Delay Time:** 1 = 15 secs; 2 = 30 secs; 3 = 45 secs Delay Disable:

- 0 = use delay set in entry 1
- 1 = dial delay disabled for zones listed in zone list 6 (use zone list 6 to enter those zones that require dial delay to be disabled; these zones ignore the setting in entry 1)

UL: Dial delay plus entry delay must not exceed one minute; use zone list 6 to disable dial delay from appropriate zones, if necessary.

Provides delay of "BURGLARY ALARM" report to the central station, which allows time for the subscriber to avoid a false alarm transmission. This delay does not apply to zone type 24 alarms (silent burglary) or to 24hour zone types 6, 7, and 8 (silent panic, audible alarm, auxiliary alarm), which are always sent as soon as they occur.

## \*53 SESCOA/Radionics Select

0 = Radionics (0-9, B-F); 1 = SESCOA (0-9 only) Select SESCOA or Radionics format. Select 0 for all other formats.

#### \*54 Dynamic Signaling Delay

- $\overline{0}$  = disabled (both signals sent);
- 1–15 = entry times a 15-second delay.
- e.g., 1 = 15 seconds, 2 = 30 seconds, etc.

Intended for use with Long Range Radio reporting.

This field lets you select the time the panel should wait acknowledgment from the first reporting for destination (see \*55) before it attempts to send a message to the second destination. Delays can be selected from 0 to 225 seconds, in 15-second increments. This delay is per message. If 0 is entered in this field, the control panel will send redundant reports to both Primary Dialer and LRR.

#### **UL Installations:**

For Fire Alarm and UL Burglar Alarm installations without Line Security (Grade A), the maximum Dynamic Signaling Delay must be no more than 15 secs.

For UL Burglar Alarm installations with Line Security (Grade AA), Dynamic Signaling Delay must be 0. Reports will be sent to both the dialer and the LRR.

## \*55 Dynamic Signaling Priority

0 = Primary dialer first; 1 = Long Range Radio (LRR) first. Intended for use with Long Range Radio reporting. You must also enable field \*29, OUTPUT TO LONG RANGE RADIO.

Select the initial reporting destination for messages as follows:

Primary Dialer First selected (0):

- If acknowledged before delay expires (see \*54), then message will not be sent to LRR.
- If not acknowledged before delay expires, message is sent to both the Primary Phone No. and LRR.

Long Range Radio First selected (1):

- If acknowledged before delay expires, then message will not be sent to the primary dialer.
- If not acknowledged before delay expires, message is sent to both the Primary Phone No. and LRR.

UL Installations: For UL Commercial Burglary installations that use a DACT and LRR, the DACT must be programmed for priority (option 0).

#### **256** Zone Programming Menu Mode

For programming zone information.

See Zone Programming section for procedures.

## \*57 Function Key Menu Mode

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For programming keypad function keys.
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See Function Key section for procedures.

## \*58 Expert Zone Programming Menu Mode

For quickly programming zone information, but is recommended only for those already familiar with \*56 menu mode. See Zone Programming section for procedures.

## System Status Report Codes

Zone report codes are programmed using interactive **\***56 or **\***58 Zone Programming modes, while system status (non-alarm) codes and restore codes are entered in data fields \*59 - \*68, \*70 - \*76, \*89. The actual report code digits that you enter depend upon the particular installation, and should agree with the Central Station office receiving the signals.

**3+1 or 4+1 Standard Format:** Enter a code in the first box: 1–9, A, B, C, D, E, or F. Enter #+10 for A (this reports a 0 on some receivers), #+11 for B, #+12 for C, #+13 for D, #+14 for E, #+15 for F.

An entry of 0 in the first box disables a report. Entering 0 in the second box advance to the next field.

**Expanded or 4+2 Format:** Enter codes in both boxes (first/second digits) for 1–9 or A–F, as described above. A *0* in the first box disables a report. A *0* in the second box eliminates the expanded message for that report.

**ADEMCO Contact ID® Reporting:** Enter a digit in the first box to enable the zone to report. Use a different digit for each zone until you have used up available digits. If the number of zones exceeds the number of available digits, begin with digit 1 again. This is an "enabling" code only and is not the actual code sent to the Central Station office. Entries in the second boxes are ignored. An entry of 0 in the first box disables the report.

**UL** Report codes are required in fields \*61, \*65, \*71, \*72, for UL Commercial Burglar Alarm installations. Report codes are required in fields \*60, \*62, \*63, \*64, \*70, \*73, \*74, \*75, \*76, for UL Commercial Burglar Alarm installations and required for Residential Fire Alarm installations.

## \*59 Exit Error Report Code

0 = no report; 1-F = see description above

V20PSIA/V15PSIA: [1] Always enabled. Also see field \*69.

After arming the system, entry/exit and interior zones remaining open after exit delay expires cause an alarm sound at the keypad and external sounder (keypad also displays "EXIT ALARM"), and entry delay begins. Disarming before the end of the entry delay stops the alarm sounding and no message is sent to the central station. The keypad will display "CA" (fixed-word) or "ALARM CANCELED" (alpha display).

If the system is not disarmed before entry delay expires, an "EXIT ALARM" message (V20PSIAV15PSIA: also zone alarm message) will be sent to the central station. The keypad will display "EA" (fixed-word ) or "EXIT ALARM" (alpha display), and alarm sounding continues until the system is disarmed (or timeout occurs).

An Exit Alarm condition will also result if a fault occurs in an exit or interior zone within 2 minutes following the end of the exit delay, and an "EXIT ALARM" message will be sent to the central station (except for **V20PSIAV15PSIA**, see field \*69 Recent Closing report). With Contact ID format, the message will contain the zone number and error code 374 ("ALARM–EXIT ERROR").

### \*60 Trouble Report Code

(0 = no report; 1 - F = see description above \*59Sent if a zone has a trouble condition. See UL System Reporting Note above \*59.

## \*61 Bypass Report Code

 $0 = no \ report; \ 1-F = see \ description \ above \ *59$ Sent when a zone is manually bypassed. See UL System Reporting Note above \*59.

## \*62 AC Loss Report Code

0 = no report; 1-F = see description above \*59

Timing of this report is random with up to a 4-hour delay. If AC restores before the report goes out, there is no "AC RESTORE" report. See UL System Reporting Note above \*59.

### \*63 Low Bat Report Code

0 = no report; 1-F = see description above \*59 Sent when the system's backup battery has a low-battery condition. See UL System Reporting Note above \*59.

## \*64 Test Report Code

0 = no report; 1-F = see description above \*59 Sent periodically to test that the communicator and phone lines are operational. See System Reporting UL Note above \*59. Frequency of report is set in Scheduling mode (event 11) or by the following key commands:

installer code + [#] + 0 + 0 = test report sent every 24 hrs installer code + [#] + 0 + 1 = test report sent once per week installer code + [#] + 0 + 2 = test report sent every 28 days Each of these modes sets schedule 32 (VISTA-20P) or 8 (VISTA-15P) to the selected repeat option; first test report sent 12 hours after command<sup>†</sup>.

**† NOTE:** Make sure the Real-Time Clock is set to the proper time **before** entering the test report schedule command to ensure that test reports are sent when expected. (see Setting the Real-Time Clock section)

## \*65 Open Report Code

 $\overline{0}$  = no report; 1-F = see description above \*59 Sent upon disarming the system in the selected partitions. See UL System Reporting Note above \*59.

## \*66 Arm Away/Stay Report Code

0 = no report; 1-F = see description above \*59

This option allows for independent programming of Away and Stay reports for each partition, including the common lobby.

**NOTE:** "OPEN" reports are not sent if the associated closing report is not enabled.

## \*67 RF Trans. Low Batt. Report Code

 $\overline{0}$  = no report; 1-F = see description above \*59

Sent when a transmitter low-battery condition exists. UL installations: must be enabled if wireless devices are used.

#### \*68 Cancel Report Code

0 = no report; 1-F = see description above \*59 Sent upon disarming the system after an alarm

condition was reported.

V20PSIA/V15PSIA: [10] Report enabled.

## \*69 Recent Closing Report V20PSIA/V15PSIA only

Alwavs enabled. Field does not apply to other controls. Similar to the Exit Error condition described in field \*59, but occurs if an entry/exit door or interior zone is faulted within two minutes **after** the initial exit delay expires. Disarming the system within the two minutes stops the alarm sound and displays "ALARM CANCELED " or "CA" and the faulted zone number. No message is sent to the Central Monitoring Station. If the system is not disarmed within two minutes, the alarm sound continues and a "recent closing" and a "zone alarm" message are sent to the Central Monitoring Station (after dial delay expires).

## \*70 Alarm Restore Report Code

 $\overline{0}$  = no report; 1-F = see description above \*59 Sent when an alarm zone is restored to non-faulted state. See UL System Reporting Note above \*59.

## \*71 Trouble Restore Report Code

 $\overline{0}$  = no report; 1-F = see description above \*59 Sent when a trouble in a zone is restored. See UL System Reporting Note above \*59.

## \*72 Bypass Restore Report Code

 $\overline{0}$  = no report; 1-F = see description above \*59 Sent when a zone that has been bypassed is unbypassed. See UL System Reporting Note above \*59.

#### 76 AC Restore Report Code

 $\overline{0}$  = no report; 1-F = see description above \*59 Sent when AC power has been restored after an AC power outage. See UL System Reporting Note above \*59.

#### \*74 Low Bat Restore Report Code

 $\overline{0}$  = no report; 1-F = see description above \*59 Sent when a system low-battery condition is restored to normal. See UL System Reporting Note above \*59.

#### **\*75** RF Xmtr Low Batt. Restore Code

0 = no report; 1-F = see description above \*59 Sent when a transmitter's low battery condition is restored (i.e., new battery installed). UL: must be enabled if wireless devices are used. See UL System Reporting Note above \*59.

## \*76 Test Restore Report Code

 $\overline{0}$  = no report; 1-F = see description above \*59 This is sent when the Test mode is exited. See UL System Reporting Note above \*59.

## **Miscellaneous System Fields**

#### \*77 Daylight Saving Time Start/End Month

 $\overline{0}$  = Disabled; 1 = Jan; 2 = Feb; 3 = Mar; 4 = April; # + 10 = Oct; # + 11 = Nov; # + 12 = Dec Enter the start and end month for daylight savings time, if applicable to the region.

#### \*78 Daylight Saving Time Start/End Weekend

 $\overline{0}$  = disabled: 1 = first: 2 = second: 3 = third: 4 = fourth: 5 = last; 6 = next to last; 7 = third to last Enter the start and end weekend for daylight savings time, if applicable to the region.

### \*79 Output Device Mapping Menu Mode

Use this menu mode to enter output devices/powerline carrier devices into the system. See Output Device Programming section for procedures.



### \*80 Output Programming Menu Mode

Use this menu mode to define output functions for use with output devices/powerline carrier devices. See Output Programming section for procedures.



## \*81 Zone List Programming Menu Mode

Use the menu mode to define zone lists. See Zone List Programming section.

\*82 Alpha Descriptor Programming Menu Mode Use this menu mode to assign alpha descriptors to zones and/or create partition descriptors (VISTA-20P).

## \*84 Auto-Stay Arm

 $\overline{0}$  = no; 1 = partition 1 only; 2 = part. 2 only; 3 = both parts. If enabled, the system will automatically change AWAY mode to STAY mode if the entry/exit door is not opened and closed within the exit delay time after a user arms in AWAY mode from a wired keypad (non-RF device). An Opening report followed by an Armed Stay report is sent to the Central Station.

If the door is opened and closed within the exit delay period, the system remains in AWAY mode.

Any RF device that arms the system AWAY overrides this feature and the system remains armed AWAY.

## \*85 Cross Zone Timer

0 = 15 secs 4 = 90 secs8 = 4 min #+12 = 8 min  $1 = 30 secs \quad 5 = 2 min$ #+13 = 10 min 9 = 5 min 2 = 45 secs 6 = 2-1/2 min #+10 = 6 min  $#+14 = 12 \min$ *3* = 60 secs *7* = 3 min #+11 = 7 min #+15 = 15 min Sets the maximum amount of time in which two cross zones must be tripped in an armed system to send an alarm message to the Central Station. If only one cross zone is tripped during this time, a trouble message (CID code 380) for that zone is sent to the Central Station. Assign cross zone pairs in zone list 4.

This option not for use in UL installations.

#### \*86 Cancel Verify Keypad Display $\overline{0} = no$ "alarm canceled" display

1 = display "Alarm Canceled" when system is disarmed after an alarm has occurred. (To clear the "ALARM CANCELED" display, the user must enter the security code + OFF again.)

This feature causes a "ALARM CANCELED" display on the LCD keypad under the following conditions:

- After the kissoff of the cancel message to the Central Station, indicating a successful transmission.
- When an alarm is successfully canceled before the Central Station received the Alarm message. E.g., if an alarm is incorrectly triggered and the user presses code + OFF before the dial delay time has expired, the message will never go out to the CS.
- When the Cancel report is not enabled and the system is disarmed:
  - a. before dialer delay expires (alarm report not sent) message "Alarm Canceled" is displayed.
  - b. after dialer delay expires message "Alarm Canceled" is not displayed.

#### \*87 Misc. Fault Delay Time

0 = 15 secs 4 = 90 secs 8 = 4 min #+12 = 8 min 1 = 30 secs 9 = 5 min  $5 = 2 \min$ #+13 = 10 min 2 = 45 secs  $6 = 2 - 1/2 \min \# + 10 = 6 \min \# + 14 = 12 \min$ *3 = 60 secs* 7 = 3 min  $#+11 = 7 \min \#+15 = 15 \min$ Used with zones assigned to a configurable zone type with fault delay on (configurable zone type digit "6"), and sets a zone response time of 15 seconds to 15 min. It can be assigned to zones with sensors that provide a trouble indication when an oil tank is low, or similar applications for critical condition monitoring where a non-alarm response is desired.

UL: May only be used on non-burglar alarm and nonfire alarm zones when used on a fire and/or UL burglar alarm installation.

#### \*88 Program Mode Lockout Options

0 = standard \*98 installer code lockout

- 1 = lockout [\*] + [#] reentry after \*98 exit (reentry via installer code only)
- 2 = not used; 3 = lockout all local programming after \*98 exit (reentry via downloader only)

The following table summarizes the Program mode lockout options:

Exit	*88	Reentry By:		
Command	Entry	Installer	Power-up†	Downloader
*99	n/a	yes	yes	yes
*98	0	no	yes	yes
*98	1	yes	no	yes
*98	3	no	no	yes

 $\dagger$  pressing [\*] + [#] within 50 seconds of power up

#### \*89 Event Log Full Report Code

0 = no report; 1-F = see description above \*59

If an Event Logging selection is made in field \*90, a message can be sent to the central station receiver when the log is 80% full. If the log becomes full, new messages overwrite the oldest messages in the log.

#### \*90 Event Log Enables

0 = no event logging; 1 = log Alarm and Restore; 2 = log Trouble and Restore

4 = log Bypass and Restore; 8 = log Open/Close

x = log combination of events (add value of entries)

This system can record various events in a history log (VISTA-20P = 100 events; VISTA-15P = 50 events). At any time, the downloader operator can then upload the log and view or print out all or selected categories of the log. The downloader operator can also clear the log. Event log can also be viewed at an alpha keypad. The display/printout at the central station will show the date, time, event, and description of the occurrences.

Data Entry Example: To select Alarm/Alarm Restore" and "Open/Close", enter 9 (1+ 8); to select all events, enter #15.

#### \*91 Option Selection

0 = none; 4 = using Audio Alarm Verification (AAV) unit; 8 = Enable Exit delay restart/reset ††

Select by adding the values of each option. E.g., for both AAV and Exit delay restart, enter # + 12 (4 + 8).

**V20PSIA/V15PSIA:** Options: Same as listed above. **Call Waiting Disable:** 0 = call waiting not used

1 = call waiting disable digits (\*70) entered in field \*40; (when selected, the system dials the entry in field \*40 only on alternate dial attempts; this allows proper dialing in the event call waiting service is later canceled by the user).

<sup>††</sup>"Exit Delay Restart/reset" option allows use of the [\*] key to restart the exit delay at any time when the system is armed STAY or INSTANT. This feature also enables automatic exit delay reset, which resets exit delay if the entry/exit door is re-opened and closed before exit delay time expires after arming AWAY. Automatic Exit Delay Reset occurs only once during an armed period.

**IMPORTANT:** AAV should not be used when Paging or Alarm Reports are sent to a secondary number unless the monitoring zone option is used (which pauses calls). Otherwise, the call to the secondary number by the communicator after the alarm report will prevent the AAV from taking control of the telephone line, and the AAV "Listen in" session cannot take place.

**UL** UL installations using the AAV feature must use the ADEMCO UVCM module (part of the ADEMCO UVS system). Exit Delay Restart/Reset must be disabled.

SIA Guidelines: Exit delay should be enabled.

#### \*92 Phone Line Monitor Enable Entry 1–Timeout:

0 = disabled; 1-15 = 1 minute to 15 minutes respectively

(2 = 2 min, 3 = 3 min, etc.; # + 10 = 10 min, # + 11 = 11 min, # + 12 = 12 min, # + 13 = 13 min, # + 14 = 14 min, # + 15 = 15 min)

#### Entry 2–Display/Sound:

- 0 = keypad display only when phone line is faulted.
- 1 = keypad display plus keypad trouble sound when line is faulted. Each partition turns off its own trouble sound. No automatic timeout.
- 2 = Same as "1" plus programmed output device STARTS. If either partition is armed, external sounder activates. External sounder will be turned off by normal bell timeout, or by security code plus OFF from either partition (it does not have to be the one that was armed).

**Entry 1:** Sets the length of time a phone line fault must remain after detected before the second digit option is activated.

**Entry 2:** Selects the desired phone line fault response. Option 2 may be used even if a relay unit or Powerline carrier device is not connected to the control.

Programmed Output Device must either be programmed to be STOPPED in field \*80 or STOPPED by entry of [security code] + [#] + 8 + device number. Partition in \*80 should be set to "0," for STOP.

**UL** Field \*92 must be enabled for fire alarm installations, UL commercial burglar alarm installations and UL residential burglar alarm installations.

If the control unit is used on a UL commercial burglar alarm system which requires 2 methods of remote communication, then the control unit's DACT and the other method of signal transmission must monitor each other against communication failure and line fault. The fault must be received and annunciated within 200 seconds of its occurrence.

## \*93 No. of Reports In Armed Period per Zone (Swinger Suppression)

0 = unlimited number of reports

1 = 1 report pair per zone per armed period

2 = 2 report pairs per zone per armed period

Selection limits the number of alarm/alarm restore message pairs per zone sent to the CS in an armed period.

SIA Guidelines: Must be set for option 1 or 2.

#### V20PSIA/V15PSIA:

**Report Pairs:** 1 = 1 report pair; 2 = 2 report pairs **Unlimited Reports Enable:** 

- 0 = restrict reports to the setting in entry 1
- 1 = unlimited reports for zones listed in zone list 7; (use zone list 7 to list zones that require unlimited reporting; these zones ignore the setting in entry 1)

## \*94 Download Phone Number

Enter up to 20 digits as follows: 0–9, # +11 for "\*",

# + 12 for "#", # + 13 for a pause.

Enter the phone number of the downloading computer. Do not fill unused spaces. End field by entering \*. To clear entries from field, press \*94\*.

### \*95 Ring Count For Downloading

0-15 = number of rings before control picks up phone line. Refer to the chart below and program accordingly.

phone module	answer machine	down- Ioading	Set field ∗95 to…
yes	no	no	1-14 (not 0)
yes	yes	no	higher than number of rings set on answer machine (e.g., if ans. machine is 4 rings, set this field to 5). This allows access to the phone module if the answer machine is off.
yes	no	yes	1-14 (not 0)
yes	yes	yes	15 (bypasses answer machine <sup>†</sup> )
no	no	no	0
no	yes	no	0
no	no	yes	1-14
no	yes	yes	15

<sup>†</sup>**NOTE:** If "15" is entered to bypass an answering machine, and a 4285 or 4286 Phone Module is included in the system, you should note the following:

When calling in from an off-premises phone, the user should make the initial call, allow 1 or 2 rings only, then hang up, then call again. The phone module will now seize the line, and 2 long tones sound, followed by the usual voice prompt for the access code. If this procedure is not followed, phone module operation will not be possible.

## \*96 Command to Initialize CSID and Subscriber Account Number

Use this command, if necessary, to reset all subscriber account numbers and the internal CSID to the factory default values.

#### \*97 Command to Reset System to Factory Default Values

Pressing \*97 resets all data fields to the factory default values (shown on the Program Form).

**IMPORTANT:** Do not press \*97 to load defaults if any programming has been done previously—data already programmed into the system will be changed!

## \*98 Command to Exit Program Mode (with installer code lockout)

Exits Programming Mode and prevents re-entry by: Installer Code + [8] + [0] + [0].

To enter the programming mode if \* 98 was used to exit, you must first power down the system. Then power up again, and press [\*] and [#] at the same time, within 50 seconds of powering up. See field \*88 for other Program mode lockout options.

## \*99 Command to Exit Program Mode

Exits Programming Mode and allows re-entry by: Installer Code + [8] + [0] + [0]

or by: Pressing [\*] and [#] at the same time, within 50 seconds of power-up.

## Pager Programming Fields

The system can send various reports to several pagers (VISTA-20P = up to 4; VISTA-15P = up to 2).

To program pager reporting, do the following:

- 1. Enter the pager phone number(s), preface characters, and pager report options in data fields \*160 \*171:
- 2. Enable Pager Delay, if desired, in field \*172 (delays alarm reporting for ALL pagers).
- 3. Make sure appropriate user open/close pager reports are enabled (see Security Codes, Assigning Attributes in *Section 6. System Communication and Operation*). Users that perform actions in partition 1 will, if enabled, attempt to report to all pagers enabled for open/close reporting in partition 1. Users that perform actions in partition 2 will, if enabled, attempt to report to all pagers enabled for open/close report to all pagers enabled for open/close reporting in partition 2.
- If using latchkey pager report, define the latchkey report schedule using Scheduling mode (master code + [#] [6] [4] then select event type 03). System must be armed for the Latchkey report to be sent.
- 5. If using a function key to manually send a message to a pager, use \*57 Function Key Menu mode to define the key (function 01).
- 6. If reporting zone alarms and troubles to a pager, use \*81 Zone List menu mode to assign the zones associated with each pager (zone lists  $9-12^{\dagger}$ ).
- <sup>†</sup> VISTA-20P supports four pagers and partitioning; VISTA-15P supports two pagers and zone lists 9 and 10 only.

#### \*160 Pager 1 Phone No. Enter up to 20 digits.

If entering fewer than 20 digits, exit by pressing [\*] + next field number. To clear entries, press \*160\*.

## \*161 Pager 1 Characters

Enter up to 16 characters.

Up to 16 optional characters may be sent as a prefix to the 7-digit system status code sent to Pager #1 (if used). Phone number in field \*160 must have been entered. If fewer than 16 characters, exit by pressing [\*] and next field number. To clear entries: press \*161\*.

The 16 characters may be composed of the following:

PIN number, Subscriber account number,

\* (enter # + 11 to send \*), # (enter # + 12 to send #), Pause (enter # + 13 to allow a 2-second pause),<sup>†</sup>

 $\ensuremath{\mathsf{special}}\xspace$  character(s) the user may decide to transmit

<sup>†</sup> Some paging systems require pause(s) before the prefix. The Pager format for the 7-digit status code is defined as follows: XXX-YYYY where:

XXX = 3-digit event code: 911 = Alarm, 811 = Trouble, 101 = Opening (disarm), 102 = Closing (arm AWAY)

YYYY = 4-digit user or zone number (depending on type of event). The first digit indicates partition (0 = system, 1 = part 1, 2 = part 2, 3 = common), followed by the 3-digit user or zone number.

Display Example 1. 911-1004 Indicates an alarm (911) caused by a fault in zone 4 (0004) in part. 1.

Display Example 2. 102-2005 Indicates the system is reporting a closing-system arming (102) by User 5 (0005) in partition 2.

## \*162 Pager 1 Report Options

- 0 = No reports sent; 1 = Open/close for all users enabled to page†; 4 = All alarms and troubles
- 5 = All alarms, troubles, and open/close for all users enabled to page
- 12 = Alarms and troubles for zones entered in zone list 9
- 13 = Alarms and troubles for zones listed in zone list 9 and open/close for all users enabled to page

Enter the types of reports to be sent to Pager 1 for each partition.

<sup>†</sup> Reports to pager only when arming (close)/disarming (open) from a keypad using a security code; auto-arming/disarming, arming with assigned button, and keyswitch arming do not send pager messages.

## \*163 Pager 2 Phone No.

#### up to 20 digits

If entering fewer than 20 digits, exit by pressing [\*] + next field number. To clear entries, press \*163\*.

#### \*164 Pager 2 Characters up to 16 characters

See field \*161 for explanation of entries. If fewer than 16 characters, exit by pressing [\*] and next field number. To clear entries, press \*164\*.

#### \*165 Pager 2 Report Options

See pager 1 reports, field \*162 for entries, except use zone list 10

## \*166 Pager 3 Phone No.

VISTA-20P. Enter up to 20 digits

If entering fewer than 20 digits, exit by pressing [\*] + next field number. To clear entries, press \*166\*.

## \*167 Pager 3 Characters

VISTA-20P. Enter up to 16 characters

See field \*161 for explanation of entries. If fewer than 16 characters, exit by pressing [\*] and next field number. To clear entries, press \*167\*.

#### \*168 Pager 3 Report Options

VISTA-20P. See pager 1 reports, field \*162, except use zone list 11

## \*169 Pager 4 Phone No.

VISTA-20P. Enter up to 20 digits

If entering fewer than 20 digits, exit by pressing [\*] + next field number. To clear entries, press \*169\*.

## \*170 Pager 4 Characters

VISTA-20P. Enter up to 16 characters

See field \*161 for explanation of entries. If fewer than 16 characters, exit by pressing [\*] and next field number. To clear entries, press \*170\*.

## \*171 Pager 4 Report Options

VISTA-20P. See pager 1 reports, field \*162, except use zone list 12

## \*172Pager Delay Option for Alarms

 $\overline{0 = \text{none}; 2} = 2 \text{ minutes}; 1 = 1 \text{ minute}; 3 = 3 \text{ minutes}$ This field determines the delay of alarm reports to the pager. This gives the Central Station enough time to verify the alarm report that it received, before the dialer attempts to dial the pager.

This delay is for ALL pagers in the system

## **Miscellaneous System Fields**

## \*174 Clean Me Option

#### 0 = disable; 1 = enable

This is a maintenance feature for ESL 2-wire smoke detectors on Zone 1. If used, this option limits the number of smoke detectors to a maximum of 10, rather than 16. To enable the "clean me" feature, a time response setting of "3" (1.2 seconds) must be entered in \*56 Zone Programming for zone 1.

## \*177 Device Duration 1, 2

0 = 15 secs	4 = 90 secs	8 = 4 min	#+12 = 8 min					
1 = 30 secs	5 = 2 min	9 = 5 min	#+13 = 10 min					
2 = 45 secs	6 = 2-1/2 min	#+10 = 6 min	#+14 = 12 min					
3 = 60 secs	7 = 3 min	#+11 = 7 min	#+15 = 15 min					
These entries set the duration for output action options								
5 (duration 1) and 6 (duration 2) programmed in *80								

5 (duration 1) and 6 (duration 2) programmed in \*80 Output Function Programming.

## \*181 50/60 Hz AC Operation

0 = 60 Hz; 1 = 50 Hz

Select the type of AC power applied to the control (option is used for Real-Time Clock synchronization)

## **Configurable Zone Type Fields**

- The system allows you to define custom zone types (VISTA-20P supports 4 [types 90-93]; VISTA-15P supports 2 [types 90, 91]), based on the options described at right.
- All configurable zone types can be programmed via the downloader.
- Configurable zone types 90 and 91 can also be programmed from a keypad using data fields \*182-\*185. UL installations: Do not configure zones as fire alarm or UL burglar alarm zones.

### \*182 Configurable Zone Type 90

0-15 = values for each of 10 entries (0-9, # + 10 = 10, # + 11 = 11, # + 12 = 12, # + 13 = 13, # + 14 = 14, # + 15 = 15) Enter the appropriate value for each entry, 1-10, based on the charts on the next page. To calculate the value for each entry, add the values of the selected options in each of the entry's columns shown in the respective chart (one option per column). For example, to program entry 2 for "alarm response to short," "auto restore on," but not a "vent zone," enter 5 ("1" for alarm short + "4" for auto restore-yes + "0" for vent zone-no).

## \*183 Zone Type 90 Report Codes

90 ALARM ID: XXX TROUBLE ID: XXX

Enter the desired 3-digit Contact ID® report codes for alarms and troubles occurring on zones assigned to this zone type. Use existing Contact ID® codes, if appropriate, or define unique codes in CID code range 750-789. Press [\*] to accept and continue.

**Important Notice on Report Codes:** To avoid confusion at the central station, it is recommended that existing Contact ID® codes be used with configurable zone types whenever possible. See list in *System Communication* section and/or check with the central station for a complete list of Contact ID® report codes. If none of the codes are suitable, choose a code in the reserved range of 750-789 and make sure to define the code with your central station.

#### \*184 Configurable Zone Type 91

0-15 = values for each of 10 entries (see field \*182 for explanation of entries.)

## \*185 Zone Type 91 Report Codes

91 ALARM ID: XXX TROUBLE ID: XXX

See field \*183 for explanation of entries and read the Important notice on using these codes.

#### **Configurable Zone Type Options**

**Auto Restore** (entry 2): Faults on zones set for this option are cleared; restore messages sent upon restoral of faults.

**Vent Zone** (entry 2): Zones set for this option are ignored if faulted when arming the system, but are protected if the zone is later restored (e.g., an open window can be ignored when arming, but if the window is later closed, it will be protected; opening the window again causes an alarm.)

**Bypass Disarmed** (entry 4): Zones set for this option can be bypassed only while the system is disarmed.

**Bypass Armed** (entry 4): Zones set for this option can be bypassed when the system is armed or disarmed.

**Dial Delay** (entry 6): Alarms on zones set for this option participate in dial delay central station reporting, if system dial delay enabled in field \*50.

**Fault Delay** (entry 6): Faults on zones set for this option are delayed by the time set in field \*87. Do not use this option if using entry/exit delay for this zone type.

**Faults Display** (entry 7): Selects how faults on zones set for this zone type are displayed.

**Power Reset/Verification**(entry 7): Selects whether the system resets power (when user enters code + OFF), and whether the system performs alarm verification (see description for zone type 16 in *Programming Overview* section) when a fault occurs on these zones.

**Use Entry Delay** (entry 8): Selects whether to use the system's entry delay times.

**Use Exit Delay** (entry 8): Selects whether to use the system's exit delay time.

**Interior Type** (entry 8): Zones set for this option are treated same as standard zone type 4 (bypasses when armed STAY, faults displayed).

 $\mbox{Alarm Sounds}$  (entry 9): Selects the type of alarms sound for zones set for this zone type.

**Bell Timeout** (entry 9): Alarm sounding on zones set for this option remain for the duration set in fields \*32 / \*33.

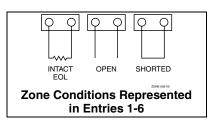
**Fire Zone** (entry 9): Zones set for this option respond in the same manner as if programmed for zone type 9. Do not set fire zones to respond as a "fault" in entries 1-6.

**Trouble Sounds** (entry 10): Selects the type of trouble sounds for zones set for this zone type (periodic beeps = once every 30 seconds; trouble beeps = rapid beeping).

**Chime Enable** (entry 10): Zones set for this option cause a chime when Chime mode is on.

#### Configurable Zone Type Charts

onligurable	e Zone Type	Unarts				
ENTRY 1		ENTRY 2				
Response when	system disarme	d and zone is:	Auto			
Intact EOL	Open	Shorted	Restore	Vent Zone		
RF zone normal	RF zone N/A	RF zn off-normal				
0 = normal	0 = normal	0 = normal	0 = no	0 = no		
1 = alarm	4 = alarm	1 = alarm	4 = yes	8 = yes		
2 = trouble 3 = fault	8 = trouble 12 = fault	2 = trouble 3 = fault				
5 = Iauli	see note 5	see note 6				
Entry 1 = EOL +			L ⊢auto restore + v	ent zone		
	Open	,				
		ENTRY 4	Dem sele en	Dura sub su		
	armed STAY an	d zone is: Shorted	Byp. when disarmed	Byp. when armed		
Intact EOL RF zone normal	Open RF zone N/A	RF zn off-normal	uisaimeu	aimeu		
0 = normal	0 = normal	0 = normal	0 = no	0 = no		
1 = alarm	4 = alarm	1 = alarm	4 = yes	8 = yes		
2 = trouble	8 = trouble	2 = trouble	4 <b>–</b> 900	0 = y00		
3 = fault	12 = fault	3 = fault				
	see note 5	see note 6				
Entry 3 = EOL +			+ bvp. disarmed +	byp. armed		
ENTRY 5	opon	ENTRY 6	Entry 4 = Short + byp. disarmed + byp. armed			
		_	Diel Deless	E		
	armed AWAY ar		Dial Delay	Fault Delay		
Intact EOL	Open	Shorted	(see field *50)	(see field *87)		
RF zone normal	RF zone N/A	RF zn off-normal	0			
0 = normal	0 = normal	0 = normal	0 = no	0 = no		
1 = alarm	4 = alarm	1 = alarm	4 = use delay	8 = use delay		
2 = trouble	8 = trouble	2 = trouble				
3 = fault	12 = fault	3 = fault		see note 1		
Entry 5 = EOL +	see note 5 Open	see note 6 Entry 6 = Short -	I ⊦ dial delay + faul	t delav		
	opon			t doidy		
ENTRY 7	Dever Deeet/	ENTRY 8		Despenden		
Display Faults	Power Reset/ Verification	Use Entry Delay 1/2	Use Exit Delay	Respond as Interior Type		
0 = show alarms		0 = no	0 = no	0 = no		
when armed	4 = power reset	1 = delay 1	4 = use exit	8 = yes		
& disarmed	after fault	2 = delay 2	delay	- ,		
1 = don't show	(with code +	,	,	see note 2		
alarms when	ÔFF)					
armed (show	12 = verification					
alarms, trbles,	(see zone					
faults when	type 16)					
disarmed)						
3 = never show						
any alarms,						
trbles, faults						
Entry 7 = fault dis	splay + power			ay 2 + exit delay +		
reset/verification		interior zone ty	pe			
ENTRY 9		ENTRY 10				
Alarm Sounds	Use Bell	Respond as	Trouble	Chime when C		
		Fire Zone	Sounds	Mode On		
-	Timeout					
0 = none	0 = no	0 = no	0 = none	0 = no		
1 = steady			1 = periodic	0 = no 4 = yes		
1 = steady keypad	0 = no 4 = yes	0 = no 8 = yes	1 = periodic beep			
1 = steady keypad 2 = steady bell	0 = no 4 = yes see fields *32,	0 = no 8 = yes see zone type	1 = periodic			
1 = steady keypad 2 = steady bell and keypad	0 = no 4 = yes	0 = no 8 = yes	1 = periodic beep			
1 = steady keypad 2 = steady bell and keypad 3 = pulsing bell	0 = no 4 = yes see fields *32,	0 = no 8 = yes see zone type	1 = periodic beep 2 = trouble			
1 = steady keypad 2 = steady bell and keypad 3 = pulsing bell and keypad	0 = no 4 = yes see fields *32,	0 = no 8 = yes see zone type 09; see note 4	1 = periodic beep 2 = trouble beeps			



#### **Configurable Zone Type Notes**

- 1. Do not use the "fault delay" option with a configurable zone type if it is set for an entry or exit delay, otherwise unpredictable results may occur.
- 2. To create an interior type zone, select "respond as interior zone type" (entry 8, interior type = yes), and set zone response to "fault" in entries 3-4 to ensure fault displays; do not set as "normal," "alarm," or "trouble."
- 3. Do not set fire zones to respond as a "fault" (entries 1-6), otherwise faults will not display unless the [\*] key is pressed.
- 4. 4219/4229 modules must use EOLRs or unpredictable results may occur.
- 5. RF Zones: The "open" options in entries 1, 3, and 5 are not applicable for RF zones. Use the "intact EOL" option for normal RF zone conditions and "shorted" for off-normal RF zone conditions.
- 6. a. Zone-Doubling/Double-Balanced: A short on either zone of a zone-doubled pair or on a double-balanced zone causes a tamper condition.
  - b. For double-balanced zones, this entry must be "0".
  - c. For zone-doubled zones, **both** zones of the doubled pair must be assigned the same response to a short.

## Touch Screen Keypad (AUI) Enable

The system supports up to two touch screen style keypads (e.g., Symphony Advanced User Interface (AUI), and 6270 Touch Screen keypad. **NOTE:** Use of touch screen devices does not affect the number of standard keypads supported.

#### \*189 AUI Device 1 and 2 Enable

**VISTA-20P:** Enter each touch screen (AUI) device's home partition.

0 = disabled; 1 = partition 1; 2 = partition 2; 3 = common

VISTA-15P: 0 = disabled; 1 = enabled

Set AUI 1 address to 1. Set AUI 2 address to 2.

**AUI Compatibility Note:** To ensure proper AUI device operation, connect only to controls having microprocessor version 3.0 or higher, and use AUI devices with the following rev levels: 6270 series use version 1.0.9 or higher; 8132/8142 (Symphony) series use version 1.1.175 or higher.

## **Keypad Programming Fields**

#### To enable keypads:

- 1. Set desired address at keypad (refer to keypad's instructions for setting the address).
- 2. Use data field program mode to enable keypad addresses, assign a partition, enable sound options in fields \*190-\*196 as shown in the table above.
- 3. If desired, use data field \*198 to turn on the display of the partition number.
- 4. Set the following keypad-related data fields as required by the installation:
  \*21 Quick Arm Enable, \*23 Forced Bypass, \*84 Auto STAY Arm
- 5. If using touch screen devices (AUI), enable each unit in field \*189 and set AUI 1 to address 1, AUI 2 to address 2.

**NOTE:** Each keypad must be assigned a unique address, **starting at address 16** (address 16 is reserved for keypad 1, which is automatically set to partition 1 with all sounds enabled). Keypads programmed with the same address will give unpredictable results.

#### \*190 Keypad 2 Device Address 17 Entry 1 – Partition Assignment:

0 = keypad disabled

1 = partition 1 (VISTA-20P)/keypad enabled (VISTA-15P) 2 = partition 2; 3 = common

#### Entry 2 – Sound Option:

- 0 = no suppression 1 = suppress arm/disarm and E/E/ beeps
- 2 = suppress chime beeps only
- 3 = suppress arm/disarm, E/E/ beeps and chime beeps

Entry 1: For VISTA-20P, enter the partition in which the keypad is located; for VISTA-15P, enter 1 to enable, or 0 to disable the keypad.

Entry 2: Enter the desired sound option for this keypad.



\*192 Keypad 4 Device Address 19 See field \*190 for entries and explanation.

\*193 Keypad 5 Device Address 20 See field \*190 for entries and explanation.

\*194 Keypad 6 Device Address 21 See field \*190 for entries and explanation.

\*195 Keypad 7 Device Address 22 See field \*190 for entries and explanation.

\*196 Keypad 8 Device Address 23 See field \*190 for entries and explanation.

## \*197 Exit Time Display Interval

 $\overline{0}$  = no display; 1-5 = seconds between display updates

If enabled, keypads display the exit time remaining after arming the system, updated at the interval selected (i.e. if the exit delay is 30 seconds and "2" is selected in this field, the keypad display refreshes every 2 seconds, displaying 30, 28, 26, 24, etc.).

An interval greater than "1" may be necessary for some older keypads to allow users time to enter key presses between display updates.

**FIXED-WORD KEYPAD NOTE:** If using 2-digit display keypads (e.g. 6150RF), do not use exit times greater than the 96-second delay option. Using a longer delay time may cause end-user confusion because 2-digit display keypads cannot display times greater than "99." If longer exit time is required by the installation, it is recommended that the Exit Time Display option be disabled ("0").

#### \*198 Display Partition Number

#### VISTA-20P. 0 = no; 1 = yes

If selected, the partition number is displayed in the upper-left corner of the display. This is useful when using the GOTO partition function.

## \*199 ECP Fail Display

0 = 3-digit display ("1" + device address)

1 = 2-digit fixed-display as "91"

Select "0" if using Alpha keypads and/or 3-digit Fixed-Word Display keypads. ECP faults will display "1" plus the device address (00-30) of device causing the fault (e.g., faults on device 07 display as "107").

Select "1" if using 2-digit Fixed-Word Display keypads (e.g., certain 6128 series keypads). If selected, ECP faults for all devices will display as "91" on 2-digit displays, and "191" on 3-digit or Alpha keypads.

### SECTION 5 Menu Mode Programming

#### **Zones and Partitions**

Each protection zone needs to be programmed with various attributes using \*56 Zone Programming mode or **\***58 Expert Programming Mode.

The VISTA-20P system can control two independent areas of protection (known as partitions) for use by independent users, if desired, by simply assigning zones to one or the other partition during zone programming. The VISTA-20P, by default, automatically distributes users between the two partitions. The master user can change the user number distributions.

Zones can also be assigned to a common partition, which is an area shared by users of both partitions (such as a lobby in a building). This allows either partition to arm, while leaving the common partition disarmed for access into the other partition. The following describes the functioning of the VISTA-20P common partition:

- The common zone sounds and reports alarms only when both partitions are armed. If only one partition is armed, the system ignores faults on the common zone.
- Either partition may arm its system if the common zone is faulted, but once armed, the other partition will not be able to arm unless the common zone is first bypassed or the fault is corrected.
- Faults on the common zone are displayed on common zone keypads, and will also appear on another partition's keypad when that partition is armed.
- Either partition can clear and restore the common zone after an alarm.

#### About Zone Programming (\*56 and \*58 Menu Modes)

- Used to program zones, zone types, report codes, enroll 5800 RF Wireless Transmitter serial numbers, and identify the type of loop input device(s).
- Can also be used to enter alpha descriptors for programmed zones; however, we recommend entering descriptors in menu mode \*82 (*Alpha Descriptor Programming* after all zone programming has been completed).
- \*58 Expert Programming mode provides a faster method of zone programming than \*56 Menu mode, but is recommended only for those who have had previous experience in programming controls of this type.

**NOTE:** Alpha display prompts are shown in a double-line box.

#### \*56 Zone Programming Procedure

- 1. Enter the zone number to be programmed.
- 2. Make appropriate entries at the prompts.
- 3. Confirm the serial number of wireless transmitter zones.

Start Zone Programming mode by pressing \*56 while in Data Programming mode.

SET TO CONFIRM? 0 = NO 1 = YES

#### Set to Confirm

0 = no; 1 = yes

If 1 (Yes) is entered, you will be prompted to confirm each transmitter after entering the serial and loop numbers (at the "XMIT TO CONFIRM" prompt later in this procedure). We recommend that you confirm the programming of every transmitter.

Enter Zn Num. (00 = Quit) 10	display at left. Enter a report code for zone Enter a report code for zone	07-22†); wireless 09-34; RF ice report enable; 92 = dures nerg. zones † if zone expanders are you wish to program. Zone 91 to enable addressable de 92 to enable duress reportin	<i>button zones 49-56</i> <i>used.</i> 10 has been entered in the example evice reporting.
Zn       ZT       P       RC       In:       L         10       00       1       10       RF:       1         OR       In:       AD       In:       AD         10       00       1       10       AW:       07         OR       In:       Zn       ZT       P       RC       HW:       RT         10       00       1       10       EL       1	(AD), which is based on the z	zones and indicates input t re expansion zones (AW) ar cone number. ire zones and indicates con	nd indicates the module's address figuration (EOL, NO, NC, zone
10 Zone Type Perimeter 03	Zone Type (ZT) See table below. Each zone must be assigned responds to faults in that zon Note: If 00 is entered, Delet 00 = Not used 01 = Entry/exit #1 02 = Entry/exit #1 02 = Entry/exit #2 03 = Perimeter 04 = Interior Follower 05 = Day/Night 06 = 24-Hr Silent *5800 button-type transmitters only	ne. Enter the Zone Type cod	
10 Partition110 Report Code1st 012nd 0010	Partition No. (P) (VISTA-24 1-3 = partition (3 = common); Enter the Partition number f Report Code (RC) First Digit: 1-9, #+10 for 0, #+ 00 to disable Second Digit: same as above, Enter the report code for this consisting of 2 numerical dig For Contact ID®, entering an	[*] to continue for this zone. Partition 1 is 11 for B, #+12 for C, #+13 for [*] to continue s zone, which consists of 2 h its. For example, for a report ny non-zero entry as the fir	shown entered.
02 HARDWIRE TYPE EOL 0	Hardwire Type 0 = EOL; 1 = NC; 2 = NO; 3 = [*] to continue † VISTA- This prompt appears only for Zone 1 is automatically set for	20P r zone numbers 02-08.	balanced (DB) <sup>†</sup>
02 Response Time 1	<b>Response Time (RT)</b> <i>0 = 10mSec; 1 = 350mSec; 2</i> This prompt appears only for Option 3: used for "clean me" <b>NOTE:</b> If zone doubling is be automatically applies to each	r hard-wired zones 01-08 (z ' option on zone 1 (see field eing used, the response tim	one 02 is the display shown). *174). e selected for zones 02-08

10 INPUT TYPE RF TRANS 3	[*] to continue This prompt is skip Type" prompt. All of the RF transp Each of the inputs of four programming 2	zone) RF transmitter ed RF transmitter) transmitter (unsupervised). ped for zones 2-8, or 2-16 if zone-doubling was enabled at "Hardwire mitters have one or more unique factory-assigned input (loop) ID codes. requires its own programming zone (e.g., a 5804's four inputs require zones). In be enrolled as one of the following types: Description
	KF (Supervised RF) UR (Unsupervised RF) BR (Unsupervised	Sends periodic check-in signals, as well as fault, restore, and low- battery signals. The trans. must stay within receiver's range. Sends all the signals that the "RF" type does, but the control does not supervise the check-in signals. The transmitter may therefore be carried off-premises. Sends only fault signals. It will not send a low-battery signal until it is activated. The transmitter may be carried off-premises.
10 INPUT S/N: L A022-4064 1	<ul> <li>and cannot be edited.</li> <li>To change the input of a wired zone (the Delete A Serial Note of the Delet</li></ul>	ardwired zones, the Input Device type is automatically displayed as HW ited. but type of a previously programmed wireless device (type RF, UR, BR) ype AW), you must first delete transmitter's serial number (see To fumber prompt on next page) <b>htry and Loop Number Entry</b> <i>rolling wireless transmitters.</i> ben/close sequences. If using a button-type transmitter, press and on twice, but wait about 4 seconds before pressing the button the second the 7-digit serial number printed on the label of the transmitter. Then y – the cursor will move to the "L" position. You can edit the loop sary. When the loop number is acceptable, press [ <b>*</b> ]. copy the serial number previously enrolled (used when programming a n several input loops).
10 INPUT S/N L A022-4064 ?	move to the Loop co highlighted question	ey is used to copy the previously enrolled serial number, the cursor will blumn (L) with the previous serial number displayed, and display a on mark for the loop number. bleer and press [ <b>*</b> ]. The system will now check for a duplicate serial/loop
10 INPUT S/N L A022-4064 1 XMIT TO CONFIRM PRESS <b>*</b> TO SKIP	the serial number a Confirmation Op [*] to continue	umber combination is not a duplicate in the system, a display showing and loop number entry will appear. tion
	The system will entinput can be confirm	ter a confirmation mode so that the operation of the actual programmed

Entd A022-4063 1 Rcvd A022-4064 1	If Serial or Loop Numbers do not match after activating the transmitter [*] to continue If the serial number transmitted does not match the serial number entered, a display similar to the one shown appears. If the loop number does not match, it will also be displayed. If so, activate the loop input or button on the transmitter once again. If a match is not obtained (i.e., summary display does not appear), press the [#] key twice and then enter (or transmit) the correct serial number.
10 INPUT S/N: L A000-0000 0	<b>To Delete a Serial No.</b> <i>0 in loop number field = delete serial number; # = undo deletion; [*] to continue</i> To delete an existing serial number, enter 0 in the loop number field. The serial number will change to 0's. If 0 was entered in error, simply re-enter the loop number or press [#], and the serial number will return to the display.
Zn ZT RC In: L 10 03 10 RF: 1s	Summary Screen [*] to continue If the serial number transmitted matches the serial number entered, the keypad will beep 3 times and a summary display will appear, showing that zone's programming. Note that an "s" indicates that a transmitter's serial number has been enrolled. Press [*] to accept the zone information and continue.
PROGRAM ALPHA?	Alpha Descriptors 0 = no; 1 = yes; [*] to continue
0 = NO 1 = YES 0	If you want to program descriptors for zones now, enter <b>1</b> (Yes) and refer to the <b>Alpha</b> <b>Descriptor Programming</b> section for available descriptors.

When all zones have been programmed, enter 00 to quit.

#### **Completing Zone Programming**

- When you have finished programming all zones, test each zone using the system's TEST mode.
- Do not use the Transmitter ID Sniffer Mode for checking wireless transmitting devices, as it will only check for transmission of one zone on a particular transmitter, NOT the zones assigned to each additional loop.

**NOTE:** Following the successful enrollment of each wireless device, note the device serial number in the appropriate column on the ENROLLED TRANSMITTERS worksheet in the Programming Form; then enter the other information (zone number, zone type, loop number, etc.) relevant to that device.

#### **\*58 Expert Programming Mode Procedures**

This method is designed for use by installers with previous experience in programming ADEMCO control panels. This mode is also used to program wireless keys using pre-defined templates.

Start Expert Programming mode by pressing **\***58 while in Data Programming mode.

#### SET TO CONFIRM? 0 = NO 1 = YES 0

Confirm?

0 = no; 1 = yes; [\*] to continueThis display appears upon entry into this mode. The default is 0 (No). If 1 (Nac) is ontered you will be promoted to confirm each t

If 1 (Yes) is entered, you will be prompted to confirm each transmitter after entering the serial and loop numbers (at the "XMIT TO CONFIRM" prompt later).

Zn ZT P RC HW: RT 01 09 1 10 EL 1	Summary Screen 01-64 = zone number; [*] to continue; 00 = quit OR [D] to go to prompts for wireless key programming templates A summary screen appears, showing zone 1's currently programmed values.
Zn ZT P RC IN: L 10 00 1 10:RF –	Enter the zone number being programmed, then press [*], which displays a summary screen for that zone. See next prompt (zone 10 in this example).
	<b>If programming a wireless key,</b> press the [D] key then skip to the Wireless Key Programming Templates section following this section. When [D] is pressed, you can choose from a series of preset templates for easy programming of wireless key zones.
	When all zones have been programmed, press 00 at this prompt to quit this menu mode.
Zn ZT P RC IN: L 10 00 1 10 RF 1	<b>Zone Programming</b> ZT = see Zone Type chart shown in *56 Menu Mode "Zone Type" prompt P = partition 1, 2, 3 (common); RC = 1 (send CID report); 0 (no report) IN = input type; L = loop number [*] to continue A summary screen with the selected zone's current programming appears. Begin programming zone information as follows: • Enter Zone Type (ZT) Dortition (D) Penert Code (RC) and Input Davise Type (IN)*
	<ul> <li>Enter Zone Type (ZT), Partition (P), Report Code (RC), and Input Device Type (IN)* sequentially, but not the Loop No. (L).</li> <li>Use the [A] (Advance) and [B] (Back) keys on the keypad to move the cursor within the screen.</li> <li>Use the [C] key to copy the previous zone's attributes.</li> </ul>
	<ul> <li>Press [*] to save the programming and continue to the serial number/loop number prompt. If needed, you can press the [#] key to back up without saving.</li> <li>* If HW (hardwired) or AW (Auxiliary) is entered for Input Device Type, the next screen will be similar to the prompt shown, except that HW or AW will be displayed under "IN". If RF, BR, or UR is entered, a prompt for Serial and Loop number will be displayed, as follows.</li> </ul>
10 INPUT S/N: L A <u>X</u> XX-XXX –	<ul> <li>Serial number</li> <li>S/N = serial number; L = loop number; [*] to continue</li> <li>Manually enter the serial number (found on the transmitter label), by typing digits in the "X" locations, using the [A] (advance) or [B] (back) keys as required. You can also perform two open and close sequences; for button-type transmitters that means pressing and releasing the button twice.</li> <li>NOTE: If you want to copy the previous zone's serial number, press the [C] key.</li> <li>Press [*] to advance to the loop number, then enter loop number.</li> <li>Press [*] to accept the existing serial and loop number and continue to the "Confirm" prompt below. If necessary, press [#] to back up and re-enter or edit the serial number.</li> </ul>
10 INPUT S/N: L A000-0000 0	<b>To Delete a Serial Number</b> [*] to continue To delete an existing serial number, enter 0 in the loop number field. The serial number will change to all 0's as shown. If 0 was entered in error, simply re-enter the loop number, and the serial number will return to the display.
10 XMIT TO CONFIRM PRESS <b>*</b> TO SKIP	Confirm [*] to continue The prompt to confirm appears. This prompt will only appear if the first prompt after entering *58 was answered "Yes." To confirm, activate the loop input or button that corresponds to this zone. The system checks for duplicate. If a duplicate exists, a long error beep will sound. Press [#] to back up and re-enter the serial and/or loop number.

Entd A022-4063 Rcvd A022-4064	If Serial or Loop Numbers do not match after activating the transmitter [*] to continue If the serial/loop number combination transmitted does not match the serial and loop number entered, a display similar to the one below will appear. If the loop number does not match, it will also be displayed. If so, activate the transmitter's loop input or button one or more times. If a match is still not obtained (i.e., summary display does not appear), press the [#] key twice and enter the correct loop input or, if correct, press [#] again and then enter the correct serial number.
Zn ZT P RC In L	Summary Screen
10 03 1 10 RF: 1s	If the serial number transmitted matches the serial number entered, the keypad will beep
Note that an "s" indicates	3 times and a summary display will appear, showing the programmed information for that
that a transmitter's serial	zone.
number has been	Press [*] to begin programming the next zone. See first "Summary Screen" prompt
enrolled.	paragraph on previous page.

To exit this mode, enter 00 at the Summary Screen prompt.

#### **Wireless Key Programming Templates**

This procedure programs the wireless keys, **but a key is not active for arming/disarming until it is assigned to a user number** (see *System Operation* section, assigning attributes command).

Enter this mode by pressing the D key while at the \*58 Menu mode Summary Screen. The following prompts appear.

TEMPLATE ? 1–6 1	<ul> <li>Template Number</li> <li>1-3 = 5804 templates; 4-6 = 5804BD templates</li> <li>Enter Template number 1-6 (see chart on next page). See the defaults provided for each template in the chart that follows these procedures.</li> <li>Select from templates. Press [*] to display template (1 shown selected). NOTE: If necessary, press [#] to back up and re-enter template number.</li> </ul>
	Press [#] if you want to return to *58 Menu mode summary screen.
L 01 02 03 04 T 23 22 21 23	<ul> <li>Template Display</li> <li>When [*] is pressed, the selected template will be displayed. Top line of display represents loop numbers; bottom line represents zone type assigned for each loop.</li> <li>Press [*] to accept template.</li> </ul>
PARTITION 1	<ul> <li>Partition</li> <li>VISTA-20P. 1 = partition 1; 2 = partition 2; 3 = common partition</li> <li>Enter the partition in which the key is to be active, then press [*] to continue.</li> </ul>
ENTER START ZONE 00 = QUIT 36	<ul> <li>Start Zone Number</li> <li>The system will search for the highest available consecutive 4-zone group (the four zones in the case of the 5804 and 5804BD), and display the lowest zone number of the group. If you want to start at a different zone, enter the zone desired, and press [*]. If that zone number is displayed, the system has the required number of consecutive zones available, beginning with the zone you entered. If not, the system will again display a suggested zone that can be used. If the required number of consecutive zones is not available at all, the system will display "00".</li> </ul>
	To quit this mode and return to *58 Menu mode, enter 00 at this prompt.
	Press [*] to accept.
INPUT S/N L AXXX-XXXX –	<ul> <li>Serial Number</li> <li>Manually enter the serial number printed on the label for the wireless key or press and release the button to transmit its serial number.</li> <li>Press [*] to accept the serial number. The system will check for a duplicate.</li> <li>If necessary, press the [#] key to back up without saving, and re-enter the serial number.</li> <li>Use the [A] key to move forward within the screen, and the [B] key to move backward.</li> </ul>

XMIT TO CONFIRI PRESS <b>*</b> TO SKIF	<ul> <li>[*] to continue</li> <li>If "Yes" w following appear. C</li> </ul>	entry into the *58 onfirm serial and	8 Expert Program	nming N	rompt previously ( lode), the display o ing the wireless ke	on the left will
		ed, the key is not the assigning at			ning until it is assi oute "4"). See <b>Syst</b>	
Entd A022-4063 Rcvd A022-4064	similar to the displayed. If so, activate	umber transmitte one shown will aj the button on the	ppear. If the loop wireless key on	number ce again	ial number entere r does not match, i . If a match is not l then enter the co	t will also be obtained (i.e.,
	3 times and w next wireless	ill return you to t key.	he Zone Number	r prompt	nber entered, the l to enter the start the Zone Number j	ing zone for the
	serial number PROGRAMM	labels from the d	evice and affix it the Programmin	t in the a ng Form	reless device, remo appropriate column ; then enter the ot that device.	n on the ZONE
YOU MUST PROGRAM	Wireless	2		-	GREEN/YELLOW	_00P 2
THIS BUTTON LOOP 4		These trans are not inter use in UL installations	mitters nded for	RED/YELLOW LED		LOOP 4 (YOU MUST PROGRAM THIS BUTTON)
ENROLL A				ENROLL AS		5804BD-007-V0
5804 Wire	less Key Transmitter			580	4BD 2-Way Wirele Transmitter	ess Key
	For 5804	7			804BD	7
TEMPLATE 1	Loop Function	<b>Zone Type</b> 23	TEMPLATE 4	<b>Loop</b>	Function No Response	Zone Type 23
	2 Disarm	22		2	No Response	23
	3 Arm Away	21		3	Arm Away	21
TEMPLATE 2	4 No Response	23 <b>Zone Type</b>	TEMPLATE 5	4 Loop	Disarm Function	22 Zone Type
	1 No Response			1	No Response	2011e Type 23
	2 Disarm	22		2	Arm Stay	20
1	3 Arm Away	21		3	Arm Away	21

		no nesponse	20			i no nesponse	20
	2	Disarm	22		2	Arm Stay	20
	3	Arm Away	21		3	Arm Away	21
	4	Arm Stay	20		4	Disarm	22
TEMPLATE 3	Loop	Function	Zone Type	TEMPLATE 6	Loop	Function	Zone Type
	1	24-hour audible	7		1	24-hour audible	7
	1	24-hour audible Disarm	7 22		1	24-hour audible Arm Stay	7 20
	1 2 3		7 22 21		1 2 3		7 20 21

#### About Output Device Programming (\*79/\*80 Menu Mode)

Output Devices:	The VISTA-20P system supports up to 16 relays and/or Powerline Carrier devices (X-10 devices) plus 2 built-in trigger outputs in any combination. These 18 "outputs" are assigned to system-wide output numbers (01-18). Use *79 Menu Mode to assign output numbers and map them to device addresses. The VISTA-15P supports 8 relays and 2 built-in trigger outputs (total 10 outputs).
Output Functions:	The system also provides installer-defined output functions, which can be assigned to any of the physical outputs. Therefore, the action of any one of the outputs can be based on as many of these functions as desired. This lets a single relay or X-10 device perform many functions. The controls support up to 48 output functions. Use *80 Menu Mode to define output functions.

Relays and output devices are not recommended for life safety applications.

**NOTE:** When navigating the \*79 and \*80 menus: The [\*] key is used to accept an entry and advance to the next prompt. The [#] key is used to revert back to the last question to check or change an entry. Press [\*] to go forward again.

#### **Programming Output Devices**

- 1. Use \*79 Menu Mode to assign module and output numbers and map them to device addresses. **NOTE:** You must map output devices using \*79 Menu Mode **before** you can use \*80 menu Mode.
- 2. Use \*80 Menu Mode to create output definitions, which control the output devices, if desired.
- 3. Use \*81 Zone List Menu mode to define zone lists for use with output devices if the device action is based on more than one zone.
- To program a device for manual activation (user code + [#] [7] / [#] [8] + 2-digit device number) or for scheduled automatic activation, simply map the device using \*79 Menu mode.
- To program a device to automatically activate upon a system event (or function key), use \*79 Menu mode to map the device, then use \*80 Menu mode to define the automated device action.

#### \*79 Menu Mode: Output Device Mapping

Use this menu to assign Relay Module device addresses and specific relay numbers, and Powerline Carrier unit numbers. The system is based on predefined module addresses for 4204 and 4229 modules. Refer to the table shown at the "Module Address" prompt on the next page and set the modules' addresses (via module DIP switches) accordingly.

The following table shows how these outputs are identified.

#### **Output Identification**

This output	is identified by
Relays	the Relay Module's device address and the relay position on that module (i.e. the physical relay
	number, 1-4, on that module).
X-10 Device	a house ID (entered in data field *27) and the unit number of the device.
Built-in Outputs	the output number assigned, 17 for Trigger 1 and/or 18 for Trigger 2.

Start Output Device Mapping by pressing \*79 while in Data Programming Mode.

#### \*79 Menu Mode

ENTER OUTPUT NO. 00 = QUIT xx	<b>Device Output Number</b> 01-18 = VISTA-20P relays/X-10; 01-08, 17, 18 = VISTA-15P relays/X-10 [*] to continue; 00 to quit This is the logical (or reference) relay number as used in the system. Relays and X-10 devices are numbered 01-16; the on-board triggers are numbered 17 and 18 and can be programmed for inverted output, if required. Use the worksheet on the Programming Form (printed separately) to organize device numbers.		
17 OUT NORM LOW 0 = NO 1 = YES 0	<ul> <li>Output Normally Low (prompt appears only for Triggers 17 and 18)</li> <li>0 = no (standard default); 1 = yes</li> <li>[*] to continue</li> <li>Selecting 0 (no) sets the output level normally high (default setting).</li> <li>Selecting 1 (yes) sets the output normally low.</li> <li>Output Trigger 17 can be used for resetting 4-wire smoke detectors by connecting it to the negative power terminal of the smoke detector, selecting 1 at this prompt, and setting as zone type 54, fire zone reset, in *80 Menu mode.</li> <li>After entry, display returns to Output Number prompt. Use *80 Menu mode to program the function of the trigger.</li> </ul>		
XX OUTPUT TYPE DELETE 0	Output Type 0 = delete; 1 = relay on 4204/4229 module; 2 = Powerline Carrier device (X-10) [*] to continue Select whether this is a relay or a Powerline Carrier (X-10) device. If Powerline Carrier is selected, go to "A" prompt. If relay is selected, skip to "B" prompt.		
XX UNIT No.	Unit Number (prompt appears if X-10 is selected) 01-16 = predefined address [*] to continue Enter the unit code (set at the device) and press [*]. The system returns to the Output Number prompt.		
" <b>B</b> " XX MODULE ADDR 07-15 yy	Module Address (prompt appears if relay is selected) $07-15 = predefined address$ $[*]$ to continueEnter the predefined address for this module as listed below. Make sure the module's DIPswitches are set to the selected address.Module AddressesAddress Module $07$ $1st 4229$ (with zones 09-16) $08$ $2nd 4229$ (with zones 17-24) $09^{\dagger}$ $3rd 4229$ (with zones 33-40) $11^{\dagger}$ $5th 4229$ (with zones 41-48) $12$ $12$ $1st 4204$ $13$ $2nd 4204$ $15^{\dagger}$ $4th 4204$		
XX REL POSITION 1-4 zz	Relay Position1-4 = relay position[*] to continueThis is the actual (or physical) relay number with respect to the Relay Module upon whichit is located. For 4204 modules, relay numbers are 1-4. For 4229 modules, relay numbersare 1-2.The system returns to the Output Number prompt for programming the next device.		

#### \*80 Menu Mode: Defining Output Functions

Use this mode to program output function definitions (up to 48 functions) that provide automated control of any of the output devices, based on events occurring on individual zones or zones with certain zone types. Each output definition is identified by an output function number, and includes the following components:

Output Definition	*
Component	Description
Output Function No.	A reference number that defines an output's characteristics.
Activated By	Determines whether the initiating event occurs on a zone, a zone list, or a zone type.
Event	Event that triggers the output action. Can be an event occurring on a specific zone number or a zone list, or a specific zone type.
Partition	If the output is activated by zone type, this defines the partition in which the programmed event is to cause the device action.
Output Action	Defines the action of the relay/X-10 device when the defined event occurs. Can close for 2 seconds, stay closed until reset, continuously pulse (1-second close-open-close-open, etc.), toggle the device state, or activate for a defined duration (set in data field *177).
Output No.	Assigns this function to a specific output number (defined in *79 Menu Mode). This is the output number that will perform this function upon the triggering event. Note that each defined function is associated with only one output number. This means that if more than one output device needs to perform this particular function, you need to define another output function number with the same attributes, but assign the appropriate output number. (i.e. output devices can be assigned more than one function number, but each function number can only be assigned a single output number.

**Output Definition Components** 

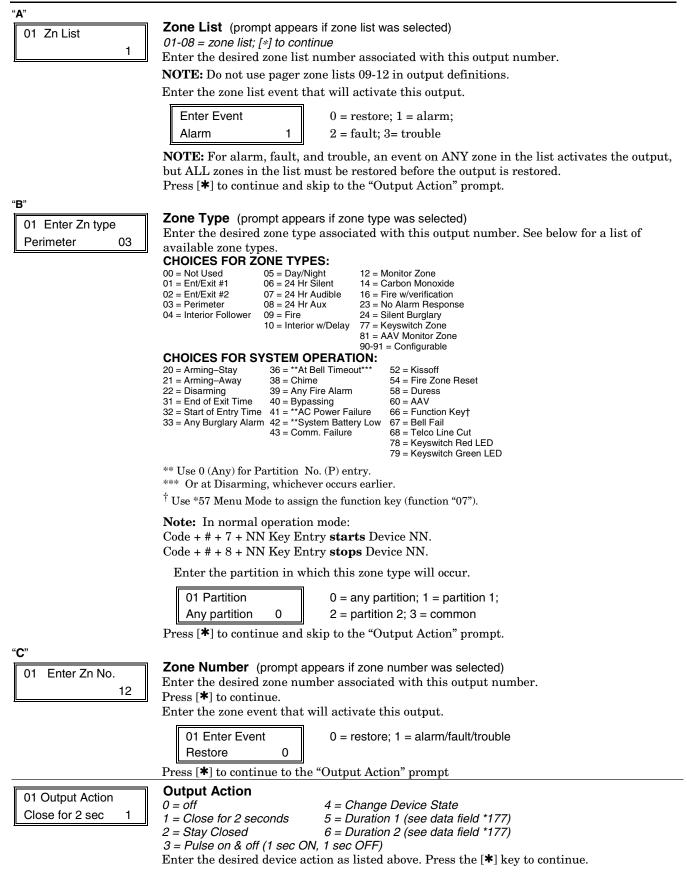
**For example,** if you want to pulse a strobe light upon fire alarms on zone 4 using a relay mapped to output number 2 (as programmed in \*79 Menu Mode), program the following in \*80 Menu Mode:

Prompt		Entry
Output Funct. #	=	01 (assuming this is the first output function)
Activated By:	=	3 (zone number)
Enter Zn No.	=	04 (requires 2-digit zone numbers)
Output Action	=	3 (continuous pulse)
Output Number	=	02 (device mapped in *79 Menu Mode)

Start Output Definition mode by pressing **\***80 while in Data Programming mode.

#### \*80 Menu Mode

Output Funct. # (00 = Quit) 01	<b>Output Function No.</b> VISTA-20P: 01-48 = output function number; VISTA-15P: 01-24 = output function number [*] to continue; 00 to quit Enter the output function number to be defined (or 00 to exit).
01 A E P Trig ?00 0 0 - ZL=00	Summary Screen [*] to continue This screen displays a summary of the current output programming (for this example, Zone List has been selected-this is the default screen). A = Output Action; E = Triggering event; P = Partition; Trig = Trigger type
	<b>NOTE:</b> A question mark in the summary screen indicates that the device number shown has not been mapped. Use *79 Menu mode to map the device.
01 Activated By: Zone List	Activated By         0 = delete         1 = zone list (go to "A" prompt)         2 = zone type (go to "B" prompt)         3 = zone number (go to "C" prompt;)         [*] to continue         Select where the initiating event for this output definition is to occur as follows:         If you enter "0," the following prompt appears:         Delete?         0 = NO, 1 = YES         Press 1 to delete this output definition. The system deletes the output function and any previous programming.



Enter Output No. R02 02	<b>Output Number</b> 01-16 = VISTA-20P output no.; 01-08 = VISTA-15P output no.; 17-18 = on-board triggers Enter the device output number (programmed in *79 Menu Mode) you want associated with this output. Press [*] to continue.
----------------------------	---

02	А	Е	Ρ	TRIG
R02	1	1	3	ZL=00

#### Summary Screen

A summary screen appears showing the programmed settings. Press [\*] to continue.

#### About Zone Lists (\*81 Menu Mode)

Zone lists let you group individual zones for use with certain system actions. The following table shows the available zone lists and their purposes:

List No.	Used for	Notes
1, 2	general purpose (GP)	• Any list may include any or all of the system's zone
3	chime-by-zone (see field *26 to enable option)	numbers.
4	cross zones (see note at right)	• A zone list can be assigned to more than one output relay.
5	night stay zones	• Zone List 4: When creating zone list 4 for cross zoning,
6	general purpose	include only zones assigned to zone types 3, 4, or 5. Do not
	V20PSIA/V15PSIA: dial delay disable	include zones that have delays (entry/exit zones, interior
7	general purpose	w/delay) or 24-hour zones, as these zone types may produce
	V20PSIA/V15PSIA: unlimited reports	unpredictable operation and may not function as intended.
8	general purpose	See field *85 for Cross Zone Timer option.
9	zones that activate Pager 1	• Zone List 6: V20PSIA/V15PSIA: See field *50 for Dial Delay
10	zones that activate Pager 2	Disable option.
11	zones that activate Pager 3 (VISTA-20P)	• Zone List 7: V20PSIA/V15PSIA: See field *93 for Unlimited
12	zones that activate Pager 4 (VISTA-20P)	Reports option.

#### Zone List Programming

1. Select an appropriate zone list number.

2. Add the desired zone numbers to be included in that list.

Start Zone List Program Mode by pressing **\***81 while in Data Programming mode.

#### \*81 Menu Mode

Zone List No. (00 = Quit) 01	<b>Zone List Number</b> 01-12 = zone list number; [*] to continue Enter the Zone List Number to program (or 00 to quit). Press [ <b>*</b> ] to advance. In the following displays, zone list 01 has been selected for programming.
01 Enter Zn Num. (00 = Quit) 00	<ul> <li>Zone Number</li> <li>01-64<sup>†</sup> = zone numbers followed by [*] to accept each zone; 00 to continue</li> <li>Enter each zone number to add to the zone list, followed by pressing [*] (example, 01*, 02*, 03*). After all zones are entered, press 00 to continue.</li> <li>IMPORTANT: Do not include fire zones in zone lists that are used to STOP device actions.</li> </ul>
01 Del Zn List? 0 = No 1 = Yes 0	<ul> <li>† VISTA-20P = 01-64; VISTA-15P = 01-06, 09-34, 49-56.</li> <li>Deleting Zone Lists <ul> <li>0 = don't delete list; 1 = delete this zone list; [*] to continue</li> <li>To delete the zone list, enter 1. All zones in the zone list will be deleted automatically and the system returns to the Zone List No. prompt.</li> <li>To save the zone list, enter 0.</li> </ul> </li> </ul>
01 Delete Zone? 0 = No 1 = Yes 0	<b>Deleting a Zone</b> 0 = don't delete zones; 1 = go to next prompt to delete zones; [*] to continue To save the zone list, enter 0 and the system returns to the Zone List No. prompt. To delete a zone or zones in a zone list, enter 1 to continue.
01 Zn to Delete? (00 = Quit) 00	<b>Delete the Zone</b> 01-64 <sup>†</sup> = zones to be deleted from list followed by [*] to accept each zone; 00 to continue Enter each zone to be deleted from the list, followed by [ <b>*</b> ]. After all zones to be deleted are entered, enter 00 to return to the Zone List No. prompt so that another list can be programmed, if desired. † VISTA-20P = 01-64; VISTA-15P = 01-06, 09-34, 49-56.

### About Function Keys (\*57 Menu Mode)

The system provides the ability to program each of the four keypad function keys to perform one of 12 system operations. The end user can then activate the function by simply pressing and holding the programmed key for 2 seconds. Typical functions (listed below) include single-button arming, turning lights on/off, or single-button paging.

To assign emergency key functions (function key option "00"), first program the respective emergency zone number (95 for "A" key, 96 for "C" key, 99 for "B" key) with the desired zone type using \*56 Zone Programming mode, then use \*57 Function Key menu mode to assign the desired key.

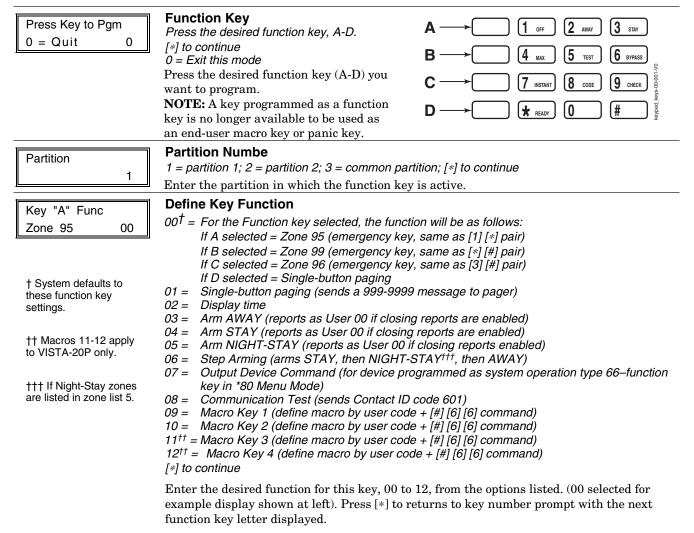
To use a function key to activate a relay action (\*57 Menu mode key function 07), use \*79 Menu mode to map the output, and use \*80 Menu mode to define the output's action; select system operation type "66."

To use a function key for a user macro, use \*57 menu mode to activate the desired key, then define the actual macro functions using the user code + [#] + [6] [6] command.

#### **Programming Function Keys**

- 1. Assign the function key number and partition.
- 2. Select the desired function for that key.

Start Function Key Programming mode by pressing \*57 while in Data Programming mode.



#### About Descriptor Programming (\*82 Menu Mode)

The system lets you assign zone descriptors for protection zones, keypad panics, and RF receiver supervision faults. Each description can be composed of a combination of words (up to 3) selected from a vocabulary of 196 words stored in memory (see a following page). In addition, up to 10 installer-defined words can be added to those already in memory, plus 3 additional words can be assigned as partition descriptors. Thus, when an alarm or trouble occurs in a zone, an appropriate description for that zone's location can be displayed at the keypad. Zone descriptors are recommended for systems using Alpha display keypads, and are necessary if a 4285 or 4286VIP Phone Module is used.

**NOTE:** You can enter zone descriptors when the zone is being defined in **\***56 Menu mode, but we recommend you do it using **\***82 Menu mode.

If using a 4285 or 4286VIP Phone Module, select from those words in the Alpha Vocabulary List shown in **boldface type**. The phone module will not provide annunciation of the other words.

If a 4285/4286 Phone Module is added to an existing system, the Alpha descriptors presently in the system should be reprogrammed, selecting from those words shown in **boldface type** in the Alpha Vocabulary List. The phone module will not provide annunciation of any other words.

#### Programming Zone Descriptors (Menu Mode \*82)

- 1. Enter index numbers for up to three words from the Alpha Vocabulary List for each descriptor by following the prompts.
- 2. Enter up to ten 10-digit custom words, if desired, which can then be used in descriptors.

When defining descriptors:

Pressing	Does This
[6]	Accepts the entered index number and moves the cursor to the next position for a descriptor.
[8]	Saves the entered descriptor and moves to the next descriptor.

Start Zone Descriptor Programming mode by pressing \*82 while in Data Programming mode.

Program Alpha ? 0=No, 1=Yes 00	<b>Program Alpha</b> <i>0 = no; 1 = yes; [*] to continue</i> The "Program Alpha ?" prompt will appear. Press 1 to continue.
Custom Words ? 0=No, 1=Yes 00	<b>Custom Words</b> 0 = no; 1 = yes; [*] to continue The "Custom Words" prompt will appear. Press 0 to program standard alpha descriptors from the fixed vocabulary. The system will then automatically display the descriptor for zone 1. Press 1 to define custom words (described later in "Adding Custom Words" section).
* ZN 01	Summary Screen [*] to continue Note that this is a "Summary mode," and that no entries can be made. Entries can be made only when the display contains a flashing cursor, which signifies the "Entry mode." To exit the Alpha descriptor mode, press * + 0 + 0 at the summary display.
* ZN 01 🗌	<ul> <li>Flashing Cursor</li> <li>[*] to continue</li> <li>To delete or change the default descriptor for zone 1, press [*] plus the same zone number (01). This will clear that descriptor and allow changes to be made at the flashing cursor.</li> <li>NOTE: If you do not wish to change the existing descriptor for zone 1, enter [*] plus the next zone number for which you wish to enter (or check) a descriptor. A summary display for that zone will appear. You must then press [*] plus the same zone number again to gain access to the entry mode (flashing cursor) for that zone.</li> </ul>
* ZN 01 BACK	<b>First 3-Digit Index No.</b> <i>see index for entries; [*] to continue</i> Press [#] plus the 3-digit number for the first word from the Alpha Vocabulary List. Example: If the descriptor for zone 1 is BACK DOOR. From the list, BACK = 013. Therefore, you would enter #013. If you accidentally enter the wrong word, simply press [#] plus the correct 3-digit number for the word you want.

* ZN 01 BACK	<b>Accept First Word</b> 6 = save word and go to next word in this descriptor; 8 = save word and go to next zone Press [6] to accept the selected word and continue to the next word, or press [8] if this is the only word you are using for the descriptor.
* ZN 01 BACK DOOR	<b>Second 3-Digit Index No.</b> <i>see index for entries; [*] to continue</i> Enter the 3-digit number for the next word. In our example, the word is DOOR, whose number is "057." Enter # 0 5 7.
¥ZN 01 BACK DOOR □	Accept Second Word 6 = save word and go to last word in this descriptor; 8 = save word and go to next zone Press [6] to accept the selected word and continue to the next word, or press [8] if these are the only words you are using for the descriptor. When descriptor is finished, press [8] to save all words in memory.
¥ZN 01 BACK DOOR	<b>Summary Screen</b> [*] to continue The flashing cursor will disappear, indicating that the word(s) are stored in memory for that zone, as shown in the summary display at the left.

To enter a descriptor for the next zone, press [\*] plus the desired zone number. The summary display appears. Repeat the previous steps to enter the descriptor for the zone.

#### Adding Custom Words (will not be annunciated by 4285/4286 Phone Module)

You can add up to 10 installer-defined words to the built-in vocabulary, which can then be used when programming zone descriptors. Each of the 10 words can actually consist of a word string of one or more words, but no more than *ten* characters can be used for each word or word string.

When adding custom words, the keypad keys perform the following functions:

- [4] Moves cursor one space to the left.
- [6] Moves cursor one space to the right.
- [8] Saves the new word in the system's memory.
- 1. Select Custom Word mode (enter 1) when the prompt "CUSTOM WORD ?" is displayed.
- 2. Enter the number (01–10<sup>†</sup>) of the custom word or word string to be created, corresponding to index numbers 245 254 respectively (for example, if you are creating the first custom word or word-string, enter 01, for the second, enter 02, etc.). A cursor will now appear at the beginning of the second line. <sup>†</sup> or 11, 12, 13 for partition 1, partition 2 and common lobby descriptors respectively. See Assigning Partition Descriptors paragraph below.

**NOTE:** Custom words 8, 9, and 10 are "reminder words" that are programmed using Scheduling Mode.

- Refer to the Character List of letters, numbers, and symbols on a following page. Press [#], followed by the two-digit entry for the first letter you would like to display (e.g., # 65 for "A"). The cursor will then move to the right, in position for the next character. To delete a character, simply enter the SPACE character (#32).
- 4. Repeat Step 3 to create the desired word(s). Note that the "4" key can be used to move the cursor to the left, if necessary. Remember, no word or word-string can exceed 10 characters.
- 5. Press the [8] key to save the custom word(s) and return to the "CUSTOM WORD ?" display. Repeat Steps 2–5 for other custom words to be entered. To change a custom word, just overwrite it. If no more are to be entered now, press [0] to return to the Descriptor entry. The custom word(s) will be automatically added to the built-in vocabulary.

#### Assigning Partition/Custom Message Descriptors

VISTA-15P: You can create a custom message display that appears on alpha keypads instead of "System Ready." To assign a custom message, use word number 11 as described below.

VISTA-20P: You can assign a partition descriptor (up to 16 characters) for each partition plus the common lobby. The system displays the appropriate partition's word instead of "DISARMED READY TO ARM."

Use the same procedure as for adding custom words (described above), but use these word numbers in step 2: 11 = partition 1 \_\_\_\_\_

- 12 = partition 2 \_\_\_\_\_ (VISTA-20P only)
- 13 = common lobby \_\_\_\_\_\_ (VISTA-20P only)

Once a custom word is entered in any of these word locations (11-13),

#### ALPHA VOCABULARY LIST (For Entering Zone Descriptors)

			-			-	-	-				
000	(Word Space)	• 059	DOWN		108	LEVEL	•	161	RIGHT		217	WINDOW *
	(	• 060	DOWNSTAIRS		• 10			162	ROOM *		219	WING
	- A -	061	DRAWER		• 110		•	163	ROOF	•	220	WIRELESS
• 001	AIR	• 062	DRIVEWAY			-		103			220	
• 002	ALARM *				111				- S -			- X -
002	ALLEY	• 064	DUCT		• 113			164	SAFE		222	XMITTER
			- E -		• 114	LOADING		165	SCREEN			– Y –
005	AMBUSH	• 065	EAST		115	LOCK		166	SENSOR		223	YARD
• 006	AREA	066	ELECTRIC		116	LOOP	٠	167	SERVICE			– Z –
• 007	APARTMENT	067	EMERGENCY	*	117	LOW	•	168	SHED *		224	ZONE (No.)
• 009	ATTIC *	068	ENTRY		• 118	LOWER		169	SHOCK	•	225	ZONE *
010	AUDIO	• 069	EQUIPMENT			– M –		170	SHOP *	٠	226	0
	– B –	• 071	EXIT *		• 119	MACHINE		171	SHORT	٠	227	1
• 012	BABY *	072	EXTERIOR		121	-		173	SIDE *		228	1ST *
• 013	BACK *	••-	-F-		122	-	•	174	SKYLIGHT	•	229	2
• 014	BAR	• 073	FACTORY		• 123						230	
• 016	BASEMENT *	075	FAMILY			-		175	SLIDING *		230	3
• 017	BATHROOM *	• 076	FATHERS		120			176	SMOKE *		-	-
• 018	BED	• 077	FENCE		126		•	178	SONS	:	232	3RD *
• 019	BEDROOM *	• 079	FIRE *		128	-	•	179	SOUTH		233	4
		• 080	FLOOR *		129			180	SPRINKLER	•	234	4TH
020	BELL				• 130		•	182	STATION	•	235	5
• 021	BLOWER	081	FLOW		• 13			184	STORE	•	236	5TH
• 022	BOILER	082	FOIL		132		•	185	STORAGE *	•	237	6
023	BOTTOM	• 083	FOYER			- N -		186	STORY	•	238	6TH
025	BREAK	084	FREEZER		• 134			190	SUPERVISED *	•	239	7
• 026	BUILDING	• 085	FRONT *		135			191	SUPERVISION	•	240	7TH
	- C -		– G –			-0-		192	SWIMMING	•	241	8
028	CABINET	• 089	GARAGE *		• 136	6 OFFICE *		193	SWITCH	•	242	8TH
• 029	CALL	• 090	GAS		• 138	B OPEN *			– T –	٠	243	9
030	CAMERA	091	GATE		139	OPENING		194	TAMPER	٠	244	9TH
031	CAR	• 092	GLASS		• 140	OUTSIDE		196	TELCO	2	15 (	Custom Word #1
033	CASH	093	GUEST		142	OVERHEAD		197	TELEPHONE		-	
034	CCTV	094	GUN			– P –	•	199	TEMPERATURE	24	16 (	Custom Word #2
035	CEILING		<b>–</b> H –		143			200	THERMOSTAT	24	47 (	Custom Word #3
036	CELLAR	• 095	HALL *		• 144	-	•	201	TOOL	24	18 (	Custom Word #4
• 037	CENTRAL	• 096	HEAT		145	-		202	TRANSMITTER	24	-	Custom Word #5
038	CIRCUIT	098	HOLDUP		• 146				– U –		-	
• 040	CLOSED *	099	HOUSE		147	-	•	205	UP	2	50 (	Custom Word #6
• 046	COMPUTER	100	INFRARED		• 148		•	206	UPPER	25	51 (	Custom Word #7
047	CONTACT	• 101	INSIDE *		150	-		207	UPSTAIRS *	2!	52 (	Custom Word #8
	– D –	102	INTERIOR			-		208	UTILITY *	2		
• 048	DAUGHTERS	102	INTRUSION		15		-	200	– V –			Custom Word #9
049	DELAYED	100	- J -		152			209	VALVE	25	54 (	Custom Word #10
• 050	DEN *	104	JEWELRY		• 153	-					NO	TE: Custom words 8,
051	DESK	104	- K -			- R -		210				10 are "reminder
• 052	DETECTOR *	• 105		_	155			212	VOLTAGE – <b>W</b> –			rds" that can be
• 053	DINING *	- 105		_	• 156			010				grammed to display
054	DISCRIMINATOR	• 10 <del>0</del>	L- LAUNDRY *		157			213	WALL			ng Scheduling Mode.
054	DISPLAY		-		159			214	WAREHOUSE		usi	ng coneduling mode.
• <b>0</b> 57	DOOR *	• 107	LEFT		160	RF	•	216	WEST			
- 057												

**Note:** Bulleted (•) words in **boldface type** are those that are also available for use by the 4285/4286 Phone Module. If using a phone module, and words other than these are selected for Alpha descriptors, the phone module will not provide annunciation of those words.

Italicized words followed by an asterisk indicate those words supported by the 6160V/6150V Voice Keypads

	CHARACTER (ASCII) CHART												
						(For Adding							
32 (s	space)	41	)	50	2	ົ 59 <b>ັ</b>	;	68	́ D	77	М	86	V
33 ်	!	42	*	51	3	60	<	69	Е	78	Ν	87	W
34	"	43	+	52	4	61	=	70	F	79	0	88	Х
35	#	44	,	53	5	62	>	71	G	80	Ρ	89	Y
36	\$	45	_	54	6	63	?	72	н	81	Q	90	Z
37	%	46		55	7	64	@	73	1	82	R		
38	&	47	/	56	8	65	Α	74	J	83	S		
39	1	48	0	57	9	66	В	75	ĸ	84	Т		
40	(	49	1	58	:	67	С	76	L	85	U		

#### **Programming Installer and User Schedules**

The system provides schedules, which can be used to automatically control 11 types of system events at predefined times. Some events are reserved for the installer only.

VISTA-20P: Provides up to 32 schedules: 16 schedules for use by the end-user, 16 for use by the installer. VISTA-15P: Provides up to 8 schedules: 4 schedules for use by the end user, 4 for use by the installer.

Start Scheduling mode by entering installer code + [#] + [6] [4] while in normal operating mode.

**NOTE:** The master code can only access schedules 01-16 (VISTA-15P = 01-04) and events 00-07.

ENTER SCHED NO. 00=QUIT 00	Schedule Number         VISTA-20P       01-16 = end-user schedules         17-32 = installer-only schedules       [*] to continue         [*] to continue       Enter the desired schedule number	VISTA-15P 01-04 = end-user schedules 05-08- = installer-only schedules per.					
ENTER EVENT NOTE: Events 07 and 10 cause the keypad to beep every 30 seconds when messages are displayed. Stop the beeps by pressing any	Enter Event 00 = clear event 01 = Relay On/Off 02 = User Access 03 = Latch Key Report to Pager 04 = Forced Stay Arming <sup>†</sup> Press [*] to continue Enter the desired event number Events 10-11 are reserved for the	05 = Forced Away Arming <sup>†</sup> 06 = Auto Disarm 07 = Display "Reminder" 10 = Display custom words <sup>††</sup> 11 = Periodic Test Report <sup>†††</sup> for event you want to occur at a specified time.					
key.	<ul> <li>Latch key report (option 03) is sent to all pagers in the user's partition and is active only when the system is armed (message sent is 777-7777). User must be enabled for paging (see User Attributes in <i>System Operation</i> section).</li> <li>† Forced bypass is automatically enabled regardless of setting in field *23.</li> <li>†† If selected, system displays custom words 8, 9, and 10 at defined time. Can be used as installer's reminder message to the end user.</li> <li>††† See key commands in <i>Testing the System</i> section to quickly set periodic test reporting intervals.</li> </ul>						
DEVICE NUMBER XX	continue to the "Start" prompt.						
GROUP NUMBER X	<b>Group Number</b> (For event 02-u 1-8 = group number; press [*] to c						
PARTITION X	<b>Partition</b> (For events 03-07, 10) 0 = all partitions; 1 = partition 1; 2 Press [*] to continue to the "Start"						
START SMTWTFS HH MMAM 0010000	<i>Press [*] to continue.</i> Enter the event's start time and	r under the desired days using the [*] key to move					

STOP SMTWTFS HH MMAM 0010000	Stop Time (For events 01-relay on/off; 02-user access; 03-latch key report) 01-12 = hour; 00-59 = minute; 0 = AM; 1 = PM; Days = place "1" under days Press [*] to continue. Enter the event's stop time and days of the week to occur. To select days, position the cursor under the desired days using the [*] key to move forward, then press "1" to select the day.
REPEAT OPTION 0-4 X	Repeat Option0 = do not repeat; 1 = repeat weekly; 2 = repeat biweekly (every other week)3 = repeat every third week; 4 = repeat every fourth weekPress [*] to continue.Enter the desired repeat option for this schedule.e.g., To make a schedule that happens everyday you would select all days with a repeatcount of 1. To make a schedule that runs for one week then stops, select everyday with arepeat count of 0.
RANDOMIZE 0=NO 1=YES X	<b>Randomize</b> (For events 01 and 11) 0 = no; 1 = yes Press [*] to continue. If selected, the scheduled start and stop times will vary within 60 minutes of the "hour" time. For example, if a schedule is set to start at 6:15pm, it will do so the first time 6:15pm arrives, but on subsequent days it will start anytime between 6:00 and 6:59 p.m.

**NOTE:** Do not use the random option if the start and stop times are within the same "hour" setting, otherwise unpredictable results may occur (e.g., the randomized stop time may occur before the start time).

### SECTION 6 System Communication and Operation

#### Panel Communication with Central Station

This system accommodates several formats for reporting alarms and other system conditions to the Central Station. The process of a successful transmission consists of both the method of communication between the control panel and the Central Station receiver; and the actual way the information is sent and displayed at the Central Station.

When the panel calls the Central Station receiver, it waits to hear a "handshake" frequency from the receiver to confirm that the receiver is on-line and ready to receive its message. Once the panel hears the handshake it is programmed to listen for, it sends its message. The panel then waits for a "kissoff" frequency from the receiver acknowledging that the message was received and understood.

If the handshake frequency is not given or is not understood by the panel, the panel will not send its message. Once the handshake frequency is received and understood by the panel, the panel sends its message. If there is an error in the transmission (the receiver does not receive a "valid" message), the kissoff frequency is not given by the Central Station receiver.

The panel makes a total of eight attempts to the primary telephone number and eight attempts to the secondary telephone number (if programmed) to get a valid message through. If the panel is not successful after its numerous attempts, the keypad displays COMM. FAILURE (on alpha keypads) or FC (on fixed-word keypads).

### **Report Code Formats**

The following chart indicates the types of (handshake/kissoff) frequencies that the panel supports and the different formats that can be sent with each.

FORMAT				
FORMAT	HANDSHAKE	TRANSMITS DATA	KISSOFF	TRANSMIT TIME
Low Speed	1400 Hz	1900Hz (10PPS)	1400 Hz	Under 15 secs
3+1, 4+1, 4+2				(Standard report)
Sescoa/Rad	2300 Hz	1800Hz (20PPS)	2300 Hz	Under 10 secs
3+1, 4+1, 4+2				(Standard report)
Express	1400–2300 Hz	DTMF (10 cps)	1400 Hz	Under 3 secs
4+2				
Contact ID	1400–2300 Hz	DTMF (10 cps)	1400 Hz	Under 3 secs

The following table describes each format in greater detail.

FORMAT TYPE	DESCRIPTION
3+1 and 4+1	Comprises a 3- (or 4-) digit subscriber number and a single-digit report
Standard Formats	code (e.g., Alarm, Trouble, Restore, Open, Close, etc).
3+1 and 4+1	Comprises a 3- (or 4-) digit subscriber number and a two-digit report code.
Expanded Formats	The first digit is displayed on the first line. On the second line, it is repeated
	3 (or 4) times and is followed by the second digit. This is the "expanded"
	digit.
4+2 Format	Comprises a 4-digit subscriber number and 2-digit report code.
ADEMCO Contact ID	Comprises a 4- or 10-digit subscriber number (depending on format
Reporting Format	selected), 1-digit event qualifier ("new" or "restore"), 3-digit event code, and
	3-digit zone number, user number, or system status number (see the
	following page).

The following table	lists codes for	reports sent in	different formats:

	Code for	Code for	
Type of	3+1/4+1	3+1/4+1	Code for
Report	Standard	Expanded	<b>4+2</b>
Alarm	SSS(S) A	SSS(S) A	SSSS AZ
		AAA(A) Z	
Trouble	SSS(S) T	SSS(S) T	SSSS Tt
		TTT(T) t	
Bypass	SSS(S) B	SSS(S) B	SSSS Bb
		BBB(B) b	
AC Loss	SSS(S) E	SSS(S) E	$SSSS EA_C$
		$EEE(E) A_C$	
Low Batt	SSS(S) L	SSS(S) L	$SSSS LL_B$
		$LLL(L) L_B$	
Open	SSS(S) O	SSS(S) O	SSSS OU
		000(0) U	
Close	SSS(S) C	SSS(S) C	SSSS CU
		CCC(C) U	
Test	SSS(S) G	SSS(S) G	SSSS Gg
		GGG(G)g	
Restore	SSS(S) R	SSS(S) R	SSSS RZ
Alarm		RRR(R) Z	
AC Restore	$\mathrm{SSS}(\mathrm{S}) \ \mathrm{R}_{A}$	$SSS(S) R_A$	$\mathrm{SSSSR}_{A} \mathrm{A}_{c}$
		$\mathbf{R}_A\mathbf{R}_A\mathbf{R}_A(\mathbf{R}_A)\mathbf{A}_c$	
LoBat Res.	$\mathrm{SSS}(\mathrm{S}) \ \mathrm{R}_L$	$\mathrm{SSS}(\mathrm{S}) \ \mathrm{R}_{\mathrm{L}}$	$\mathrm{SSSS}\mathrm{R}_L\mathrm{L}_B$
		$R_L R_L R_L (R_L) L_B$	
Trouble Res.	$\mathrm{SSS}(\mathrm{S}) \ \mathrm{R}_T$	$SSS(S) R_T$	${ m SSSS} \ { m R}_{T} { m t}$
		$R_T R_T R_T \left( R_T \right) t$	
Bypass Res.	$\mathrm{SSS}(\mathrm{S}) \ \mathrm{R}_B$	$SSS(S) R_B$	${ m SSSS} \ { m R}_{ m B}{ m b}$
		$R_B R_B R_B  (R_B) b$	

#### Where:

SSS or SSSS = Subscriber ID

- A = Alarm Code–1st digit
- Z = Typically Zone Number\*–2nd digit
- Tt = Trouble Code (1st & 2nd digits)
- Bb = Bypass Code (1st & 2nd digits)
- $EA_{C}$  = AC Loss Code (1st & 2nd digits)
- $LL_B = Low Battery Code (1st \& 2nd digits)$ 
  - O = Open Code–1st Digit

- C = Close Code-1st Digit
- U = User Number (in hex)

Gg = Test Code (1st & 2nd digits)

R = Restore Code (Alarm)

- $R_{T}t$  = Restore Code (Trbl) 1st & 2nd digits
- $R_Bb$  = Restore Code (Byps) 1st & 2nd digits
- $R_AA_C$  = Restore Code (AC) 1st & 2nd digits
- $R_L L_B$  = Restore Code (Bat) 1st & 2nd digits

\*Zone numbers for:**\*** & #, or B = 99; 1 + **\***, or A = 95; 3 + #, or C = 96; Duress = 92

#### Ademco Contact ID®

The Ademco Contact ID<sup>®</sup> Reporting Format comprises the following:

4-digit or 10-digit subscriber number (depending on format selected).

1-digit event qualifier ("new" or "restore").

3-digit event code.

2-digit Partition No.

3-digit zone number, user number, or system status number (see the following page).

 $\begin{array}{l} \mbox{Ademco Contact ID}^{\mbox{$\mathbb{R}$}} \ \mbox{Reporting takes the following format: CCCC(CCCCCC) Q EEE GG ZZZ where:} \end{array}$ 

CCCC(CCCCCC) =Customer (subscriber) ID

- Q = Event qualifier, where:
  - $\mathbf{E} = \mathbf{new} \text{ event}$  , and  $\mathbf{R} = \mathbf{restore}$
- EEE = Event code (3 hexadecimal digits)
  - *Note:* For a complete list of event codes, refer to the central office receiver manual.
- GG = Partition Number (system messages show "00")
- ZZZ = Zone/contact ID number reporting the alarm, or user number for open/close reports. System status messages (AC Loss, Walk Test, etc.) contain zeroes in the ZZZ location.

#### TABLE OF CONTACT ID EVENT CODES (some event codes may not apply to certain control panels)

Code	Definition
110	Fire Alarm
121	Duress
122	Alarm, 24-hour Silent
123	Alarm, 24-hour Audible
131	Alarm, Perimeter
132	Alarm, Interior
134	Alarm, Entry/Exit
135	Alarm, Day/Night
143	Alarm, Expansion Module
145	ECP Module cover tamper
146	Silent Burglary
150	Alarm, 24-Hour Auxiliary/Monitor zone
162	Carbon Monoxide
301	AC Power
302	Low System Battery/Battery Test Fail
305	System Reset (Log only)
309	Battery Test Failure
321	Bell/Siren Trouble
333	Trouble, Expansion Mod. Supervision
341	Trouble, ECP Cover Tamper
344	RF Receiver Jam
351	Telco Line Fault
353	Long Range Radio Trouble
373	Fire Loop Trouble
374	Exit Error Alarm
380	Global Trouble, Trouble Day/Night

Code	Definition
381	RF Sensor Supervision
382	Supervision Auxiliary Wire Zone
383	RF Sensor Tamper
384	RF Sensor Low-battery
393	Clean Me
401	Disarmed, Armed AWAY, Armed MAXIMUM
403	Schedule Arm/Disarm AWAY
406	Cancel by User
407	Remote Arm/Disarm (Downloading)
408	Quick Arm AWAY
409	Keyswitch Arm/Disarm AWAY
441	Disarmed/Armed STAY/INSTANT,
	Quick-Arm STAY/INSTANT
442	Keyswitch Arm/Disarm STAY
459	Recent Closing
570	Bypass
601	Manually Triggered Dialer Test
602	Periodic Test
606	AAV to Follow
607	Walk Test Entered/Exited
623	Event Log 80% Full
625	Real-Time Clock was Changed (log only)
627	Program Mode Entry (log only)
628	Program Mode Exit (log only)
642	Latch Key (log only)
750 -	Reserved for Configurable Zone Type
789	report codes (check with central station
	when using these codes)

#### **System Security Codes**

The systems provides one Installer code, one System Master code, plus a set of other user codes intended for other users of the system. These codes can each be assigned one of 5 authority levels, which determine the functions each code can perform as listed in the table below.

VISTA-20P: Provides 48 security codes (plus Installer code), including one System Master code, two Partition Master codes, and 45 general user codes.

VISTA-15P: Provides 32 security codes (plus Installer code), including one System Master code and 31 general user codes.

Level	User No.	Functions
Installer	01	(default=4112) perform all security functions except can disarm only if used to arm; can enter program mode; can change System Master code; cannot assign any other user codes
System Master	02	(default 1234) only one system master code per system; can perform all security functions, add/delete users in either partition, change system master code, view event log, set system clock, program keypad macro, program scheduled events, activate output devices (triggers/relays)
Partition Master (default)	P1 = 03 P2 = 33	VISTA-20P. Same as Master, except add/delete users limited to assigned partition only, (these users can be assigned different authority levels, if desired; any user can be assigned the partition master authority level)
0-User	03-49 (V20P) 03-33 (V15P)	perform security functions (arm, disarm, etc.) only; cannot add/delete users, view event log, set system clock or program scheduled events
1-Arm Only	see "user"	arm system only
2-Guest	see "user"	can disarm the system only if it was used to arm the system
3-Duress	see "user"	performs security functions, but also silently sends a duress message to the central station; reports as duress code user number.
4-Partition Master	see "user"	VISTA-20P. See Partition Master paragraph above; used to assign other user numbers as partition masters

Authority Levels (can be assigned to users 03-49 only; users 1 and 2 cannot be changed)

Refer to the user guide for detailed procedures on adding/deleting security codes and changing user attributes.

The following is a brief description of how to add user codes.

Changing the System Master code...

Using Installer code: Installer code + [8] + 02 + new code

Using current System Master code: System Master code + [8] + 02 + new code + new code again

Adding a User Code: Master code + [8] + 2-digit user no. + user's code

Deleting a User Code: Master code + [8] + 2-digit user no. + [#] [0]

Assigning Attributes: Master code + [8] + 2-digit user no. + [#] [attribute no.] + value

Attributes:	Values
1 = Authority Level	0-4 (see Authority Level table above)
2 = Access Group	0-8 (0 = not assigned to a group)
3 = Active Partition(s)	1, 2, 3 (common)
for this user;	Enter partitions consecutively if more than one and press [#] to
	end the entries.
4 = RF Zone No.	Assigns user number to button type zone for arm/disarm
	(keyfob must be enrolled in system first; see Wireless Key
	<i>Templates</i> section).
5 = Open/Close Paging	1 for yes, 0 for no

#### **Keypad Functions**

The following is a brief list of system commands. For detailed information concerning system functions, refer to the User's Manual. For Touch Screen style keypad users, refer to the separate Touch Screen keypad (AUI) User's Guide.

#### Voice Keypads

The 6150V/6160V Voice Keypads provide the following features:

- Message Center, which lets the user record and playback one message.
- Voice Status, which can announce system status by using the STATUS key.
- Voice Chime, which can alert users to the opening of doors/windows while the system is disarmed.

Refer to the User Guide for specific procedures for activating and using these features.

Function	Description
Silence alarms	Pressing any key will silence the keypad sounder for 10 seconds. Disarming the system will
	silence both keypad and external sounders.
Quick Arm	If enabled (field *21), you can press [#] in place of the system's security code, plus the
	desired arming key (Away, Stay, Instant, Maximum)
Single-Button arming	If programmed (*57 Function Key menu mode), lettered keys A-D can be used for arming,
	using options 3-AWAY, 4-STAY, 5-NIGHT-STAY, or 6-Step-Arming
	If used, no security code is required to arm the system.
Alarm Memory	When the system is disarmed, any zones that were in an alarm condition during the armed
	period will be displayed. To clear this display, simply repeat the disarm sequence (enter
	the security code and press the OFF key) again.
Arming Away	Enter code + AWAY [2] or simply press appropriate lettered key on the keypads (see
	"Single-Button Arming" above). If the "Auto-Stay Arm" feature is enabled (field *84) and
	the entry/exit door is not opened and closed within the programmed exit delay time, the
	system will automatically arm in STAY mode if armed from a wired keypad (non-RF
	device). If the door <b>is</b> opened and closed within the exit delay period, the system arms in
	AWAY mode.
Arming Stay	Enter code + STAY [3] or simply press appropriate key on the keypads (see "Single-Button
	Arming" above). See "Arming Away" above for Auto-Stay arming feature.
Arming Night-Stay	Enter code + STAY [3] + STAY [3] or simply press appropriate key on the keypads (see
	"Single-Button Arming" above).
Arming Instant	Enter code + INSTANT [7].
Arming Maximum	Enter code + MAXIMUM [4] or simply press appropriate lettered key on the keypads (see "Single-Button Arming" above).
Disarming	Enter code + OFF [1]. If entry delay or an alarm is active, you do not need to press
	OFF.
Bypassing Zones	Enter code + BYPASS [6] + zone number(s).
Forced (Quick) Bypass	To automatically bypass all faulted zones, use the "Quick Bypass" method. Enter code +
	BYPASS + [#], then wait for all open zones to be displayed. Arm when display indicates
	"ZONE BYPASSED" and "READY TO ARM".
Chime Mode	Enter code + CHIME [9]. To turn chime off, enter code + CHIME again.
Activate Output	If relay outputs (via a 4204, or 4229), or Powerline Carrier devices are used, two keypad
Devices	entries available to the user are included. If programmed, these entries can be used to
	manually activate or deactivate the device(s) for starting or stopping some action, such as
	turning lights on or off, etc. These keypad entries are:
	[Security Code] + # + 7 + [2-digit Device #] activates (starts) that device.
	[Security Code] + # + 8 + [2-digit Device #] deactivates (stops) that device.

#### **Keypad Commands**

Arming Mode	Features for Each Arming Mode			
	Exit Delay	Entry Delay	Perimeter Armed	Interior Armed
AWAY	Yes	Yes	Yes	Yes
STAY	Yes	Yes	Yes	No
NIGHT-STAY	Yes	Yes	Yes	only those zones listed in Night- Stay zone list
INSTANT	Yes	No	Yes	No
MAXIMUM	Yes	No	Yes	Yes

#### SUMMARY OF ARMING MODES

#### **Panic Keys**

There are three Panic keys (A, B, and C) that, if programmed, can be used to manually initiate alarms and send a report to the central station.

Each key can be programmed for 24-hour Silent, 24-hour Audible, Fire, or Personal Emergency responses. The programmed Panic response is activated when the appropriate key is pressed for at least 2 seconds.

The Panic keys are identified by the system as follows:

Keys	Displayed as Zone
[A] <b>(*/1)</b>	95
[B] <b>(*/#)</b>	99
[C] <b>(3/#)</b>	96

**IMPORTANT:** For a Silent panic function (if programmed) to be of practical value, you must program a report code for the zone and the system must be connected to a central station.

#### Setting the Real-Time Clock

Set the time and date by doing the following:

1. +[#] + [6] [3]

(Security Code)

2. Press [\*] when the time/date is displayed.

A cursor appears under the first digit of the hour.

To move cursor ahead, press [\*]. To go back, press [#].

- Enter the 2-digit hour setting.
- Enter the 2-digit minute setting.
- Press [1] for PM or [2] for AM.
- Enter the last two digits of the current year.
- Enter the 2-digit month setting.
- Enter the 2-digit day setting.

3. To exit, press [\*] when cursor is at the last digit, or wait 10 seconds.

Alpha Display:

DISARMED READY TO ARM

TIME/DATE SAT 04:04PM 10/17/00 Current time display

TIME/DATE SAT 04:04P2000/10/17

Time/date editing display

#### Various System Trouble Displays Fixed Disp. Alpha Display Meaning ALARM CANCELED CA will appear if an exit or interior zone contained a fault during closing at the time the Exit Delay ended (e.g., exit door left open), but the system was disarmed during the Entry Delay time. The alarm sounder and keypad sound continuously, but stop when the system is disarmed. No message will be transmitted to the central station. EXIT ALARM EA appears when Exit Delay ends if an exit or interior zone contained a fault during closing. The alarm sounder and keypad sound continuously until the system is disarmed (or timeout occurs). An "Exit Alarm" message is sent to the central station. Also results if an alarm from an exit or interior zone occurs within 2 minutes after the end of an Exit Delay. CHECK CHECK indicates that a problem exists with the displayed zone(s) and requires attention. ALARM 1xx 1xx indicates that communication between control and a zone expander or wireless FAULT 1xx 1xx receiver is interrupted, where "xx" is the device address. Check the wiring and CHECK 1xx 1xx DIP switch settings on the units. 91 If field \*199 is set to "1," all ECP module problems are displayed as "91." If there are wireless sensors in the system, the Check condition may also be caused by some change in the environment that prevents the receiver from receiving signals from a particular sensor. SYSTEM LO BAT BAT with no zone number indicates that the system's standby battery is weak. BAT LO BAT with a zone number and a once-per-minute beeping at the keypad indicates that a low-battery condition exists in the wireless sensor displayed (zone "00" indicates a wireless keypad). If the battery is not replaced within 30 days, a "CHECK" display may occur. NOTE: Some wireless sensors contain a non-replaceable long-life battery which requires replacement of the entire unit at the end of battery life (e.g., Nos. 5802, 5802CP). TELCO FAULT 94 Telephone Line Failure, indicates that a monitored telephone line (if programmed in field \*92) has been cut or disconnected. Depending on how the system was programmed, the keypad may also produce a trouble sound, and the external sounder may be activated. Silence by entering installer code + OFF. Busy-Standby dl If this remains displayed for more than 1 minute, the system is disabled. Mode m Comm CC The system is in communication with the central station for change of function or status verification. no display no display Power Failure If there is no keypad display at all and the LEDs are unlit, operating power (AC and battery) for the system has stopped and the system is inoperative. If the message "AC LOSS" (Alpha display keypads) or "NO AC" (Fixed-Word display keypads) is displayed, the keypad is operating on battery power only. If the battery standby capacity is used up during a prolonged AC power outage, the control's power will shut down to minimize deep discharge of the battery. Comm. Failure FC A communication failure has occurred. Open Circuit OC The keypad is not receiving signals from the control; sees an open circuit. Long Rng Trbl bF Backup LRR communication failure. Bell Failure 70 Bell supervision failure. **RCVR** Jam 90 RF jam detected. 00 BAT **KEYPAD LOW BAT** Wireless keypad low battery. Phone Okay Cd The dialer test has been successful (CID code 601). Dialer Off dO The dialer is disabled. Test in Progress dd Walk test mode is active(CID code 607). Upload Completed dC The upload or download session was completed. Upload Failed dF The upload or download session failed before completion.

### SECTION 7 Testing the System

#### **About Test Procedures**

After the installation is complete, you should perform the following tests:			
System Test:	Checks that all zones have been installed properly and the system responds to faults.		
<b>Dialer Test:</b>	Checks that the phone connection to the central station is working properly.		
Go/No Go Test:	Checks that transmissions can be received from transmitters. Should be performed		
	before permanently mounting transmitters.		
<b>RF Sniffer Mode:</b>	Checks that RF transmitter serial numbers have been properly enrolled.		
<b>Battery Tests:</b>	Automatic battery tests are performed by the system.		

#### **System Test**

With the system in the disarmed state, check that all zones are intact (not faulted). Doors and windows with contacts should be closed, PIRs should be covered (use a cloth to mask them temporarily if necessary). If a "NOT READY" message is displayed, press [\*] to display the faulted zone(s). Restore faulted zone(s) if necessary, so that the "READY" message is displayed.

1. Enter Installer Code + 5 [TEST] , then press "0" at the prompt to start Walk Test mode.

1=DIAL.	0=WALK
,	• • • • • • •

(no special display on Fixed-Word keypads)

The following will be displayed and a Contact ID report will be sent (code 607):

TEST IN PROGRESS

("dd" displayed on Fixed-Word Display Keypads)

- Upon entering the system test mode, the outside sounder should sound for 1 second. If the backup battery is discharged or missing, the sounder may not turn on and a "LOW BATTERY" report will be transmitted with a "TEST" report. The keypad will beep about every 40 seconds as a reminder that the system is in the Test mode.
   NOTE: Wireless motion detectors (Passive Infrared units) will send signals out only if they have been inactive for 3 minutes (conserves battery life).
- 3. Test all sensors using the procedure described in the User's Guide "Testing the System" section.
- 4. After checking sensors, turn off the test mode by entering installer code + OFF.

**NOTE**: Test mode automatically ends after 4 hours. During the final 5 minutes (after 3 hours 55 minutes of Test mode), the keypad emits a double-beep every 30 seconds to alert that the end of Test mode is nearing.

#### **Checking Transmitter Enrollment (Sniffer Mode)**

Use this mode to verify that all transmitters have been properly programmed. Make sure both partitions are disarmed before trying to enter this mode, since this is a system-wide command.

- 1. Press [Installer code] + [#] + 3.
  - **NOTE:** If the communicator is in the process of sending a report to the central station, the system will not go into the Sniffer mode. If so, wait a few minutes, and try again.

The keypads in both partitions will display all zone numbers of wireless units (in both partitions) programmed into the system. Fault each transmitter in turn, causing each one to send a signal. As the system receives a signal from each of the transmitters, the zone number of that transmitter disappears from the display.

2. After all transmitters have been checked, exit the sniffer mode by keying [Installer code] + OFF. **IMPORTANT:** Sniffer mode does not automatically expire. You must manually exit Sniffer mode (by entering [Installer code] + OFF) to return to normal operation.

- **NOTES:** All BR type units must physically be activated to clear the display.
  - When one button of a transmitter (RF, UR, or BR) is activated, all zones assigned to other buttons on that transmitter are cleared from the display. This also applies to 5816 and 5817 transmitters, which have multiple loops (zones).
  - Any transmitter that is not "enrolled" will not turn off its zone number.

#### Go/No Go Test Mode

The Go/No Go Test verifies adequate RF signal strength from the proposed transmitter location, and allow you to reorient or relocate transmitters if necessary, before mounting the transmitters permanently. This mode is similar to the Transmitter Test mode, except that the wireless receiver gain is reduced. This will enable you to make sure that the RF signal from each transmitter is received with sufficient signal amplitude when the system is in the normal operating mode.

- 1. Enter [Installer code] + [#] + 4 from the partition being tested. For multi-partition systems, repeat this test for each partition.
- 2. After you have placed transmitters in their desired locations and the approximate length of wire to be run to sensors is connected to the transmitter's screw terminals (if used), fault each transmitter. Do not conduct this test with your hand wrapped around the transmitter, as this will cause inaccurate results.
  - a. The keypad will beep three times to indicate signal reception and display the zone number.
  - b. If the keypad does not been, you should reorient or move the transmitter to another location. Usually a few inches in either direction is all that is required.
- 4. If each transmitter produces the proper keypad response when it is faulted, you can then permanently mount each of the transmitters according to the instructions provided with them.
- 5. Exit the Go/No Go Test mode by entering: [any user code (partition-specific)] + OFF.

#### **Dialer Communication Test and Periodic Test Reports**

1. Enter Installer Code + 5 [TEST], then press "1" at the prompt to start the Dialer Test.

(no special display on Fixed-Word keypads) 1=DIAL. 0=WALK

The following will be displayed (accompanied by 2 beeps) if test is successful: PHONE OKAY ("Cd" displayed on Fixed-Word Display Keypads)

A Contact ID report will also be sent (code 601)

- If the dialer test is unsuccessful, "COMM FAILURE" (or FC) is displayed.
- 2. Enter Installer code + OFF to clear the display and exit.

#### **Automatic Periodic Test Report**

The system can be set to automatically send test reports (enabled in field \*64; Contact ID code 602) at specified intervals. Frequency of the reports is set in Scheduling mode (event 11) or by the following key commands:

**installer code + [#] + 0 + 0 =** test report sent every 24 hours

**installer code** + [#] + 0 + 1 = test report sent once per week

**installer code + [#] + 0 + 2** = test report sent every 28 days

Each mode sets schedule 32 (VISTA-20P) or schedule 08 (VISTA-15P) to the selected repeat option; the first test report is sent 12 hours after command.

To ensure that test reports are sent at the times expected, set the Real-Time Clock to the proper time before entering the test report schedule command.

#### **Automatic Standby Battery Tests**

- 1. An automatic test is conducted every 3 minutes to ensure that a standby battery is present and properly connected. If a battery is not present or is not properly connected, a "LOW BATTERY" message is displayed and, if so programmed, will be reported to the central station.
- 2. A battery capacity test is automatically conducted for 2 minutes every 4 hours, beginning 4 hours after exiting the Programming mode or after powering up the system. In addition, entry into the Test mode will also cause a battery capacity test to be initiated. If the battery cannot sustain a load, a "Low Battery" message is displayed and, if so programmed, will be reported to the central station.

### Specifications & Accessories

#### **Security Control**

**1. Physical:** 12-1/2" W x 14-1/2" H x 3" D (318mm x 368mm x 76mm)

#### 2. Electrical:

VOLTAGE INPUT: 16.5VAC from plug-in 25VA transformer, ADEMCO 1321 (in U.S.A.) RECHARGEABLE BACKUP BATTERY: 12VDC, 4AH (sealed lead acid type). Charging Voltage: 13.8VDC.

- ALARM SOUNDER: 12V, 2.0 Amp output can drive 12V BELLS or can drive one or two 702 (series connected) self-contained 20-watt sirens. Do **not** connect two 702s in parallel.
- AUXILIARY POWER OUTPUT: 12VDC, 600mA max.

**NOTE**: For UL installations, Alarm Sounder plus Auxiliary Power currents should not exceed 600mA total.

FUSE: Battery (3A) No. 90-12

#### 3. Communication:

communication,	
FORMAT SUPPORTED:	
ADEMCO Express:	10 characters/sec, DTMF (TouchTone) Data Tones,
	1400/2300Hz ACK, 1400Hz KISSOFF.
ADEMCO Low Speed:	10 pulses/sec, 1900Hz Data Tone, 1400Hz ACK/KISSOFF.
Radionics/SESCOA:	20 pulses/sec, 1800Hz Data Tone, 2300Hz ACK/KISSOFF.
	Can report 0-9, B-F
Ademco Contact ID	10 characters/sec., DTMF (TouchTone) Data Tones,
	1400/2300Hz ACK, 1400Hz KISSOFF.
LINE SEIZE: Double Pol	e

RINGER EQUIVALENCE: 0.1B

FCC REGISTRATION No.: 5GBUSA-44003-AL-E

4. Maximum Zone Resistance: Zones 1–8 = 300 ohms excluding EOLR standard zones

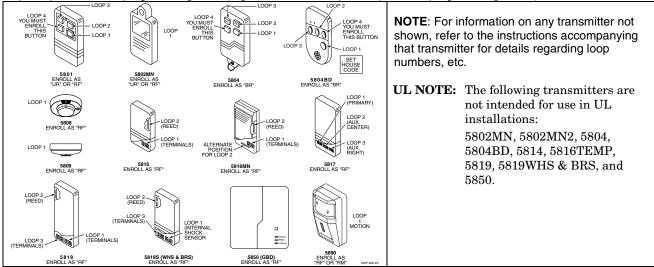
#### **Compatible Devices**

Keypads:	6150 Fixed-Word Keypad, 6160 Alpha Keypad, 6150V and 6160V Voice Keypads, 6270 Touch Screen Keypad, Symphony Advanced User Interface
Wireless Receivers:5881L/5882L: accepts up to 8 transmitters 5881M/5882M: accepts up to 16 transmitters 5881H/5882H: accepts up to system maximum transmitters 5800TM Transmitter Module (used with Wireless 2-Way Ke 5883 Transceiver: accepts up to system maximum transmit 6150RF Keypad/Transceiver: accepts up to system max. tra	
Zone Expansion: Relay Module: Phone Modules:	4219 WIRED EXPANSION MODULE 4229 WIRED EXPANSION/RELAY MODULE 4204 RELAY MODULE 4285 PHONE MODULE 4286VIP PHONE MODULE
Long Range Radio	7835C/7845C

2-Wire Smoke Detector:					
	Detector Type	System Sensor Model No.			
	Photoelectric w/heat sensor, direct wire	2300TB			
	Photoelectric, direct wire	2400			
	Photoelectric w/heat sensor, direct wire	2400TH			
	Photoelectric	2451 w/B401B base			
	Photoelectric w/heat sensor	2451TH w/B401B base			
	Ionization, direct wire	1400			
	Ionization	1451 w/B401B base			
	Photoelectric duct detector	2451 w/DH400 base			
	Ionization duct detector	1451D w/DH400 base H			
	Low-profile, Photoelectric, w/135°F thermal	2100T			
	Low-profile, Ionization type, direct wire	1100			
Transformers:	1321: 16.5VAC, 25VA Plug-In Transformer (No. 132 1361X10: 16.5VAC, 40VA Powerline Carrier device				
Sounders:	Ademco AB-12M 10" Motorized Bell & Box Ademco 1011BE12M 10" Motorized Bell & Box Ademco 702 Outdoor Siren Ademco 719 2-Channel Siren Ademco 747 Indoor Siren Ademco 747UL Indoor Siren Ademco 744 Siren Driver Ademco 745X3 Voice Siren Driver Ademco 705-820, 5-inch Round Speaker Ademco 713 Speaker System Sensor PA400B (beige)/; PA400R (red) Inc	door Piezo Sounder			

#### 5800 Series Transmitter Input Loop Identification

All of the transmitters illustrated below have one or more unique factory assigned input (loop) ID codes. Each of the input loops requires its own programming zone (e.g., a 5804's four inputs require four programming zones).



#### **Compatible 5800 Series Transmitters Table**

Model	Product	Input Type	Description
5801	Wireless Panic Transmitter	UR or RF	<ul><li>Four pushbuttons, each with a unique input (loop) code.</li><li>Programmable responses (e.g., Panic, Arm, Disarm, etc.)</li></ul>
5802	Pendant (Personal Emergency Transmitter)	BR Only	<ul> <li>Has single pushbutton.</li> <li>Usually programmed for response type of 24-Hr audible or 24-Hr Silent (other zone responses are possible).</li> </ul>
5802CP	Belt Clip (Personal Emergency)	BR Only	Same as 5802.
5802MN	Miniature (Personal Emergency Trans.)	UR or RF	Same as 5802.
5804	Wireless Key Transmitter	BR Only	<ul> <li>Has four pushbuttons, each with a unique input (loop) code.</li> <li>Programmable responses (e.g., Arm, Disarm, etc.)</li> </ul>
5804BD	Bi-Directional Wireless Key	BR	<ul> <li>House ID must be set.</li> <li>Requires 5800TM Transmitter Module.</li> <li>Can indicate system status via its 2 LEDs and built-in sounder.</li> <li>Has four pushbuttons, each with a unique input (loop) code.</li> <li>Operates the system similarly to wired keypads.</li> </ul>
5806 5807 5808	Wireless Photoelectric Smoke Detectors	RF	One-piece smoke detectors with a built-in transmitter.
5809	Heat Detector	RF	One-piece rate-of-rise heat detector with a built-in transmitter.
5816 5816MN	Door/Window Transmitters	RF	Has two unique input (loop) codes: one for a wired closed circuit contact loop; the other for its built-in reed switch (used with a magnet).
5816TEMP	Low-Temp. Sensor	RF	Transmits a fault condition when temperature drops below 45°F.

### Compatible 5800 Series Transmitters Table (continued)

Model	Product	Input Type	Description
5817	Multi-Point Universal Transmitter	RF	Has three unique input (loop) codes: one for a "Primary" contact loop with programmable options; the others for two "auxiliary" closed circuit contact loops.
5818	Recessed Transmitter	RF	<ul> <li>Reed switch magnetic contact sensor; easily hidden in the frame and edge of a door or window.</li> <li>Has a single unique input (loop) code.</li> </ul>
5819	Shock Processor Transmitter	RF	<ul> <li>Connects to externally mounted inertia-type shock detector (not supplied).</li> <li>Has built-in tampered cover switch.</li> <li>Has 3 unique input (loop) codes: Loop 1: Terminals for a wired, N.C. sensor loop. Loop 2: For a closed circuit contact loop using the built-in reed switch in conjunction with a magnet. Loop 3: Terminals for a wired, closed circuit contact loop.</li> </ul>
5819WHS 5819BRS	Shock Processor Transmitter	RF	<ul> <li>Has built-in shock sensor.</li> <li>Has built-in tampered cover switch.</li> <li>Has 3 unique input (loop) codes: <i>Loop 1:</i> Built-in shock sensor loop wired to TB1 (normally closed). <i>Loop 2:</i> For a closed circuit contact loop using the built-in reed switch in conjunction with a magnet. <i>Loop 3:</i> Externally wired, closed circuit loop connected to TB2.</li> </ul>
5827	Wireless Keypad	Uses House ID only	<ul> <li>Can be used to turn the burglary protection on and off.</li> <li>Features the same built-in panic functions as wired keypads.</li> <li>The keypad is identified as zone "00" on wired keypads when it transmits with a low battery.</li> </ul>
5827BD	Wireless Two-Way Keypad	Uses House ID only	<ul> <li>Requires 5800TM Transmitter Module.</li> <li>Operates the system similarly to wired keypads, including panics.</li> <li>Can indicate system status via its 3 LEDs and sounder.</li> <li>Includes 3 panic keys.</li> </ul>
5849	Glassbreak Detector	RF	<ul> <li>House ID must also be set.</li> <li>Requires both sound and shock of breaking glass to cause alarm to be transmitted.</li> </ul>
5890	PR Detector	RF	Dual-element passive infrared detector/transmitter with built-in selectable pulse count. <i>Note:</i> There is a 3-minute lockout between fault transmissions to conserve battery life.
5899	Magnets		Package of 4 magnets for use with 5816 and 5817 transmitters.

# Regulatory Agency Statements

#### **RADIO FREQUENCY EMISSIONS**

#### Federal Communications Commission (FCC) Part 15

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### **Industry Canada**

This Class B digital apparatus complies with Canadian ICES-003. Cet Appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

#### **TELEPHONE/MODEM INTERFACE**

#### FCC Part 68

This equipment complies with Part 68 of the FCC rules. On the front cover of this equipment is a label that contains the FCC registration number and Ringer Equivalence Number (REN). You must provide this information to the telephone company when requested.

This equipment uses the following USOC jack: RJ31X

This equipment may not be used on telephone-company-provided coin service. Connection to party lines is subject to state tariffs. This equipment is hearing-aid compatible.

#### **Industry Canada**

**NOTICE**: The Industry Canada Label identifies certified equipment. This certification means that the equipment meets telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together, This precaution may be particularly important in rural areas.

**Caution**: Users should not attempt to make such connections themselves but should contact appropriate electric inspection authority, or electrician, as appropriate.

#### **Ringer Equivalence Number Notice:**

The **Ringer Equivalence Number** (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5.

#### **Industrie Canada**

**AVIS**: l'étiquette d'Industrie Canada identifie le matériel homologué. Cette étiquette certifie que le matériel est conforme aux normes de protection, d'exploitation et de sécurité des réseaux de télécommunications, comme le prescrivent les documents concernant les exigences techniques relatives au matériel terminal. Le Ministère n'assure toutefois pas que le matériel fonctionnera à la satisfaction de l'utilisateur.

Avant d'installer ce matériel, l'utilisateur doit s'assurer qu'il est permis de le raccorder aux installations de l'enterprise locale de télécommunication. Le matériel doit également être installé en suivant une méthode acceptée da raccordement. L'abonné ne doit pas oublier qu'il est possible que la conformité aux conditions énoncées ci-dessus n'empêche pas la dégradation du service dans certaines situations.

Les réparations de matériel nomologué doivent être coordonnées par un représentant désigné par le fournisseur. L'entreprise de télécommunications peut demander à l'utilisateur da débrancher un appareil à la suite de réparations ou de modifications effectuées par l'utilisateur ou à cause de mauvais fonctionnement.

Pour sa propre protection, l'utilisateur doit s'assurer que tous les fils de mise à la terre de la source d'energie électrique, de lignes téléphoniques et des canalisations d'eau métalliques, s'il y en a, sont raccordés ensemble. Cette précaution est particulièrement importante dans les régions rurales.

Avertissement : L'utilisateur ne doit pas tenter de faire ces raccordements lui-même; il doit avoir racours à un service d'inspection des installations électriques, ou à un électricien, selon le cas.

**AVIS : L'indice d'équivalence de la sonnerie** (IES) assigné à chaque dispositif terminal indique le nombre maximal de terminaux qui peuvent être raccordés à une interface. La terminaison d'une interface téléphonique peut consister en une combinaison de quelques dispositifs, à la seule condition que la somme d'indices d'équivalence de la sonnerie de tous les dispositifs n'excède pas 5.

#### **UL NOTICES**

- 1. Entry Delay No. 1 and No. 2 (fields \*35, \*36) cannot be greater than 30 seconds for UL Residential Burglar Alarm installations, and entry delay plus dial delay should not exceed 1 minute. For UL Commercial Burglar Alarm installations, total entry delay may not exceed 45 seconds.
- 2. For UL Commercial Burglar Alarm (Grade AA) and UL Residential Burglar Alarm installations with line security, total exit delay time must not exceed 60 seconds. For UL Burglar Alarm installations without line security (Grade A), total exit delay time must not exceed 120 seconds.
- 3. The maximum number of reports per armed period (field \*93) must be set to "0" (unlimited) for UL installations.
- 4. Periodic testing (see scheduling mode) must be at least every 24 hours.
- 5. Alarm Sounder plus Auxiliary Power currents must not exceed 600mA total for UL installations (Aux power 500mA max.).
- 6. All partitions must be owned and managed by the same person(s).
- 7. All partitions must be part of one building at one street address.
- 8. If used, the audible alarm device(s) must be placed where it/they can be heard by all partitions.
- 9. For UL commercial burglar alarm installations the control unit must be protected from unauthorized access. The tamper switch installed to protect the control unit enclosure door is suitable for this purpose.
- 10. Remote downloading without an alarm company technician on-site (unattended downloading) is not permissible for UL installations.
- 11. Auto-disarming is not a UL Listed feature.

#### Notes for SIA Installations

1. As SIA limits for delay of alarm reporting and sounding can exceed UL limits for commercial and residential applications, the following UL requirements per UL681 are provided:

The maximum time that a control unit shall be programmed to delay the transmission of a signal to a remote monitoring location, or to delay the energizing of a local alarm sounding device to permit the alarm system user to enter and disarm the system, or to arm the system and exit shall not exceed:

- a) 60 seconds for a system with standard line security or encrypted line security,
- b) 120 seconds for a system without standard line security or encrypted line security, or
- c) 120 seconds for a system that does not transmit an alarm signal to a remote monitoring location.
- 2. \*34 Exit Delay: minimum exit delay is 45 seconds
- 3. \*35/\*36 Entry Delay 1 and 2: minimum entry delay is 30 seconds.
- 4. \*39 Power Up in Previous State: must be "1," power up in previous state
- 5. \*40 PABX Access Code or Call Waiting Disable: If call waiting is used, call waiting disable option in field \*91 must be set.
- 6. \*50 Burglary Dial Delay: delay must be minimum of 30 seconds.
- 7. \*59 Exit Error Alarm Report Code: Always enabled.
- 8. \*69 Recent Closing Report Code: Always enabled.
- 9. \*91 Option Selection: Exit Delay option should be enabled. If call waiting is used, Call Waiting Disable must be set to "1" (enabled).
- 10. \*93 No. reports in Armed Period: Must be set for 1 or 2 report pairs.

#### WARNING THE LIMITATIONS OF THIS ALARM SYSTEM

While this System is an advanced design security system, it does not offer guaranteed protection against burglary, fire or other emergency. Any alarm system, whether commercial or residential, is subject to compromise or failure to warn for a variety of reasons. For example:

- Intruders may gain access through unprotected openings or have the technical sophistication to bypass an alarm sensor or disconnect an alarm warning device.
- Intrusion detectors (e.g., passive infrared detectors), smoke detectors, and many other sensing devices will not work without power. Battery-operated devices will not work without batteries, with dead batteries, or if the batteries are not put in properly. Devices powered solely by AC will not work if their AC power supply is cut off for any reason, however briefly.
- Signals sent by wireless transmitters may be blocked or reflected by metal before they reach the alarm receiver. Even if the signal path has been recently checked during a weekly test, blockage can occur if a metal object is moved into the path.
- A user may not be able to reach a panic or emergency button quickly enough.
- While smoke detectors have played a key role in reducing residential fire deaths in the United States, they may not activate or provide early warning for a variety of reasons in as many as 35% of all fires, according to data published by the Federal Emergency Management Agency. Some of the reasons smoke detectors used in conjunction with this System may not work are as follows. Smoke detectors may have been improperly installed and positioned. Smoke detectors may not sense fires that start where smoke cannot reach the detectors, such as in chimneys, in walls, or roofs, or on the other side of closed doors. Smoke detectors also may not sense a fire on another level of a residence or building. A second floor detector, for example, may not sense a first floor or basement fire. Finally, smoke detectors may not always warn about fires caused by carelessness and safety hazards like smoking in bed, violent explosions, escaping gas, improper storage of flammable materials, overloaded electrical circuits, children playing with matches, or arson. Depending on the nature of the fire and/or location of the smoke detectors, the detector, even if it operates as anticipated, may not provide sufficient warning to allow all occupants to escape in time to prevent injury or death.
- Passive Infrared Motion Detectors can only detect intrusion within the designed ranges as diagrammed in their installation manual. Passive Infrared Detectors do not provide volumetric area protection. They do create multiple beams of protection, and intrusion can only be detected in unobstructed areas covered by those beams. They cannot detect motion or intrusion that takes place behind walls, ceilings, floors, closed doors, glass partitions, glass doors, or windows. Mechanical tampering, masking, painting or spraying of any material on the mirrors, windows or any part of the optical system can reduce their detection ability. Passive Infrared Detectors sense changes in temperature; however, as the ambient temperature of the protected area approaches the temperature range of 90° to 105°F (32° to 40°C), the detection performance can decrease.
- Alarm warning devices such as sirens, bells or horns may not alert people or wake up sleepers if they are located on the other side of closed or partly open doors. If warning devices are located on a different level of the residence from the bedrooms, then they are less likely to waken or alert people inside the bedrooms. Even persons who are awake may not hear the warning if the alarm is muffled by noise from a stereo, radio, air conditioner or other appliance, or by passing traffic. Finally, alarm warning devices, however loud, may not warn hearing-impaired people.
- Telephone lines needed to transmit alarm signals from a premises to a central monitoring station may be out of service or temporarily out of service. Telephone lines are also subject to compromise by sophisticated intruders.
- Even if the system responds to the emergency as intended, however, occupants may have insufficient time to protect themselves from the emergency situation. In the case of a monitored alarm system, authorities may not respond appropriately.
- This equipment, like other electrical devices, is subject to component failure. Even though this equipment is designed to last as long as 10 years, the electronic components could fail at any time.

(Continued)

#### WARNING THE LIMITATIONS OF THIS ALARM SYSTEM (Continued)

The most common cause of an alarm system not functioning when an intrusion or fire occurs is inadequate maintenance. This alarm system should be tested weekly to make sure all sensors and transmitters are working properly. The security keypad (and remote keypad) should be tested as well.

Wireless transmitters (used in some systems) are designed to provide long battery life under normal operating conditions. Longevity of batteries may be as much as 4 to 7 years, depending on the environment, usage, and the specific wireless device being used. External factors such as humidity, high or low temperatures, as well as large swings in temperature, may all reduce the actual battery life in a given installation. This wireless system, however, can identify a true low-battery situation, thus allowing time to arrange a change of battery to maintain protection for that given point within the system.

Installing an alarm system may make the owner eligible for a lower insurance rate, but an alarm system is not a substitute for insurance. Homeowners, property owners and renters should continue to act prudently in protecting themselves and continue to insure their lives and property.

We continue to develop new and improved protection devices. Users of alarm systems owe it to themselves and their loved ones to learn about these developments.

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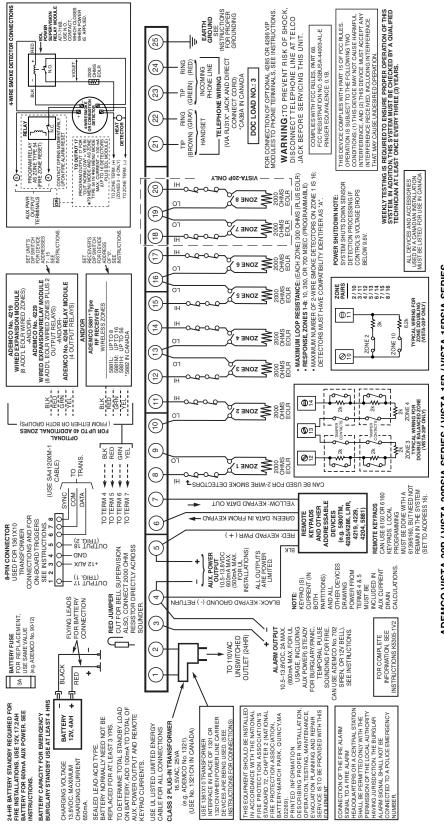


Figure 17. Summary of Connections



V20P\_V15P-SOC-V5

#### LIMITED WARRANTY

Honeywell International Inc., acting through its Security & Custom Electronics business ("Seller") 165 Eileen Way, Syosset, New York 11791, warrants its product(s) to be in conformance with its own plans and specifications and to be free from defects in materials and workmanship under normal use and service for 24 months from the date stamp control on the product(s) or, for product(s) not having a manufacturer's date stamp, for 12 months from date of original purchase unless the installation instructions or catalog sets forth a shorter period, in which case the shorter period shall apply. Seller's obligation shall be limited to repairing or replacing, at its option, free of charge for materials or labor, any product(s) which is proved not in compliance with Seller's specifications or proves defective in materials or workmanship under normal use and service. Seller shall have no obligation under this Limited Warranty or otherwise if the product(s) is altered or improperly repaired or serviced by anyone other than Honeywell factory service. Connection of any device(s) to a communicating bus of a Honeywell security system (e.g., keypad bus, polling loop) other than those manufactured or approved by Honeywell shall void this warranty. For warranty service, return product(s) transportation prepaid, to Honeywell Factory Service, 165 Eileen Way, Syosset, New York 11791.

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